Urban District Council of Oswaldtwistle.

Annual Report of the Medical Officer,

ALSO

Report upon Sanitation by the Sanitary Inspector,

FOR THE

DISTRICT OF OSWALDTWISTLE,

For Year ended 31st December, 1913.

Oswaldtwistle:
J. W. JACKSON, PRINTER, 62, UNION ROAD.

Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

https://archive.org/details/b29939641

Health Committee,

From April, 1913, to April, 1914.

Councillor T. W. WALTON, Chairman.
" M. CRANKSHAW.
" W. H. GASTALL.
" F. GREENWOOD.
" G. GRIMSHAW.
" A. HARGREAVES, J.P.
" T. HINDLE.
" J. HOULDSWORTH.
" J. MASON.
" J. PILKINGTON.
" J. RILEY.

Meetings First Thursday in each month at 2-45 p.m.

Health Department.

Medical Officer of Health: ALFRED E. TOWNLEY, M.B., Ch.B.
Fellow of the Royal Institute of Public Health.
Sanitary Inspector: - ARTHUR ASHWORTH, C.R.S.I.
Clerk to Health Department: - ARTHUR OGDEN.
Disinfector: - JOS. SHARPLES.
Caretaker of Smallpox Hospital: - ABRAHAM TAYLOR.
Foreman of Scavenging Department: HERBERT HARTLEY.
Caretaker of Slaughterhouses: JOS. SHARPLES.

To the Chairman and Members of the Urban District
. Council of Oswaldtwistle.

Gentlemen,

I have the honour to submit to you my TENTH ANNUAL REPORT on the Health and Sanitary condition and administration of Oswaldtwistle, for the year ending December 31st, 1913.

The numerous tables contained in this report show in a clear and concise form the health statistics and chief sanitary features of the district. Many of them have been designed by myself, and others are compiled in accordance with the requirements of the Local Government Board, and will, I think, be found to contain a very complete record of the past and previous years. The several diagrams included give at a glance, in a striking manner, the rise or fall as the case my be in the various death rates, and also in the birth rate.

The most regrettable feature is the marked increase in the death rate, which, after a constant gradual decline for six years, has suddenly risen almost to the figures of 1906, and the natural increase of population by excess of births over deaths is only 104, or with one exception the smallest of which I have any record.

This increased death rate has not been due to any epidemic of notifiable infectious disease, but the number of deaths from diarrhœa and enteritis has risen considerably, being 21 against 4 in the previous year, and this fact partly explains the increase.

None of the tabulated defined diseases can be said to have contributed appreciably, but a marked increase is seen in section 28 in the table on page 17, where the "other defined diseases" show an increase of 26 over the previous year, and almost entirely in persons over 45 years of age.

The infantile mortality also shows a considerable increase over the previous six years, and is fully accounted for by the rise in the number of deaths from diarrhœal diseases, and in the group which includes premature birth and congenital debility.

It is satisfactory to find a slight though appreciable increase in the birth rate, and with the exception of mumps, infectious diseases have not been markedly prevalent. A small outbreak of scarlet fever occurred, and is referred to in the appropriate section in this report.

Several important sanitary schemes are now under the consideration of your Council, viz: Sewerage of Belthorn and Knuzden, the provision of a Refuse Destructor, the erection of a new Smallpox Hospital, and the increase of the water supply; all these are discussed at length in the following pages.

The office provided for me at the Town Hall during the past year is greatly appreciated, and has been of great service in the carrying out of my work.

To the Chairman and Members of the Health Committee, the Clerk, the Accountant, the Surveyor, and the Sanitary Inspector, I tender my thanks for many kindnesses and assistance in my work during the year, and also for help in the preparation of this report.

I am, gentlemen,

Your obedient servant,

ALFRED E. TOWNLEY,

Medical Officer of Health.

April, 1914.

The Township lies between latitude 53 degrees 42 minutes and 53 degrees 45 minutes north, and longitude 2 degrees 21 minutes to 2 degrees 26 minutes west, in the Parliamentary Division of Accrington, and County of Lancashire, and Poor Law District of the Blackburn Union.

Boundaries of the District.		Altitude in feet above sea level along the boundaries.
On the north by the districts of Church and Rishton,	from	400 to 550
On the south by Haslingden and Yate & Pickup Bank	,,	850 to 1225
On the east by Accrington	,,	446 to 950
On the west by Blackburn	,,	500 to 850

Area. The Area of Oswaldtwistle comprises 4,885 statute acres, 23 of which are water.

Assessable value for the District Rate £55,236.

Rateable value for the Poor Rate £60,591.

The town is chiefly built of stone, and lighted with gas supplied from works belonging to the District Council. The river Tinker flows through the Township, and the Leeds and Liverpool Canal also passes through.

There is also a service of electric trams supplied by the Corporations of Blackburn and Accrington.

Apart from the main built up portion are the following hamlets :—

Belthorn ...	2½	miles from the	Town Hall.
Knuzden ...	2	,,	,,
Stanhill ...	1	,,	,,
Broadfield ...	¾	,,	,,
Spread Eagle ...	¾	,,	,,

		Feet above sea level.
Altitudes. At the boundary with Church, at the bottom of Union Road ...	the altitude is	423
At Moscow Mill Street	,,	450
Opposite the Town Hall	,,	483
At the boundary with Blackburn on Blackburn Road	,,	490
At Mother Red Cap Inn, on Blackburn Road	,,	532
In New Lane, which is the highest part of the built up portion of the district ...	,,	581
At the centre of Stanhill Village ...	,,	598
At the Shoulder of Mutton Hotel, Cross Edge	,,	874
At the National School, which is the highest portion of the Belthorn Village ...	,,	1020

The soil consists of loam, while the subsoil of the built-upon portion is mostly marl and clay, and in some of the outlying districts peat.

Stanhill Village, Broadfield, and Belthorn Village are mostly upon the grit rock, which crops up to the surface in a number of places. These villages are upon the higher altitudes—from 600 feet to 1000 feet above sea level.

Population. The census taken in April, 1911, shewed the population to be 15,714, an increase of 1,522 on the census of 1901. The estimated population at the middle of the year 1913 was 16,040.

Taking the whole of the Township, the above figures give a density of population of 3.28 per acre, though the Urban portion of the district has a far greater density.

Population and Houses, 1911 Census.

	Area in statute acres. Land & inland water.	Families or separate occupiers.		POPULATION.				Institutions, large establishm'nts, vessels, etc., 1911, included in cols. 4 and 6.	
				1901	1911				
		1901	1911	Persons	Persons	Males	Females	No.	Population
Col. 1.	2	3	4	5	6	7	8	9	10
Oswaldtwistle.	4885	3074	3554	14200	15714	7527	8187	12	56
Wards :—									
Foxhill Bank	....	....	857	....	3820	1799	2021	..	....
Immanuel	....	....	952	....	4133	2014	2119	1	1
Saint Michael's ..	....	....	203	....	886	435	451	..	....
Saint Oswald's ..	....	....	629	....	2874	1392	1482	1	1
Saint Paul's	....	....	913	....	4001	1887	2114	10	54

The population according to the Census of

1801	was	2710	1861	was	9246
1811	,,	3512	1871	,,	10282
1821	,,	4960	1881	,,	12206
1831	,,	5897	1891	,,	13296
1841	,,	6643	1901	,,	14192
1851	,,	7654	1911	,,	15714

Houses Inhabited.		Houses Uninhabited.	
1891	2753	1891	516
1901	3067	1901	297
1911	3554	1911	94

I am obliged to Mr. Hunter, the Surveyor, for the following figures shewing the rainfall for each month during the year:

Rainfall from January 1st, to December 31st, 1913.

	Inches.
January	6.31
February	3.10
March	7.30
April	8.45
May	4.58
June	4.10
July	1.45
August	2.92
September	2.06
October	1.91
November	7.96
December	3.77
	53.91

The greatest rainfall in a month since January, 1882, was 11.85 inches in December, 1911, and the lowest .31 inches in February, 1895.

Table showing Rainfall in the following years.

1882	...	63.23 inches	1898	...	43.69 inches
1883	...	51.98 ,,	1899	...	46.20 ,,
1884	...	42.84 ,,	1900	...	50.11 ,,
1885	...	45.53 ,,	1901	...	34.14 ,,
1886	...	52.46 ,,	1902	...	33.60 ,,
1887	...	29.93 ,,	1903	...	56.42 ,,
1888	...	37.07 ,,	1904	...	35.97 ,,
1889	...	41.53 ,,	1905	...	36.16 ,,
1890	...	50.43 ,,	1906	...	41.19 ,,
1891	...	60.16 ,,	1907	...	44.00 ,,
1892	...	50.42 ,,	1908	...	42.77 ,,
1893	...	50.78 ,,	1909	...	49.78 ,,
1894	...	52.71 ,,	1910	...	59.50 ,,
1895	...	46.41 ,,	1911	...	62.41 ,,
1896	...	52.00 ,,	1912	...	63.37 ,,
1897	...	56.44 ,,	1913	...	53.91 ,,

It will be seen from the above table that more rain fell in 1912 than in any year of which I have record.

Occupations. The inhabitants are employed at various trades, viz.: Chemical manufacturing, Cotton Spinning and Weaving, Coal Mining, Paper Making, Calico Printing, and Milk Farming. A large number are also employed in neighbouring iron and machinery works.

A large proportion of the female inhabitants are engaged in the cotton industry.

The numbers of persons in receipt of poor law relief on the 1st July, 1913, were as follows, viz :—

Men.	Women.	Children.	Total.
5	9	10	24

On the 1st January, 1914, there were in receipt of out-relief:—

Men.	Women.	Children.	Total.
3	11	9	23

Births. During the year, 359 births were registered as belonging to the district, one of which occurred outside the Township, but the mother having her usual place of residence in Oswaldtwistle, the birth has to be included as having occurred here.

Of the 359 births 169 were boys and 190 were girls. 19 were illegitimate.

The birth rate on an estimated population of 16,040 is 22.38 per 1000, compared with 349 births and an annual birth rate of 21.99 per 1000 in the previous year.

The Notification of Births Act, 1907, has not been adopted.

Births Registered, 1913.

1913.	Immanuel Ward.	Saint Paul's Ward.	Foxhill Bank Ward.	Saint Oswald's Ward.	Saint Michael's Ward.	Whole Township.
January	4	5	7	9	2	27
February	8	10	8	5	0	31
March	7	8	2	9	1	27
April	8	5	8	9	2	32
May	6	6	9	9	0	30
June	11	12	9	9	2	43
July	4	7	7	3	0	21
August	8	9	8	7	0	32
September	4	10	3	6	2	25
October	13	9	3	11	3	39
November	8	6	5	5	0	24
December	7	5	12	1	2	27
Workhouse	—	—	—	—	—	1

Total Births.

Legitimate	84	88	87	92	77	81	80	83	12	14	340	359
Illegitimate	4		5		4		3		2		19	

Population	4221	4087	3401	2926	905	16040
Birth Rate	20.84	22.51	20.77	28.36	15.46	22.36

Table of Birth Rates for the last Nineteen years.

Year		Rate per 1000	Year		Rate per 1000
1895	...	29.33	1905	...	23.96
1896	...	31.54	1906	...	25.98
1897	...	28.13	1907	...	25.40
1898	...	30.00	1908	...	25.26
1899	...	25.29	1909	...	23.60
1900	...	26.51	1910	...	21.78
1901	...	26.62	1911	...	23.34
1902	...	27.44	1912	...	21.99
1903	...	26.85	1913	...	22.38
1904	...	21.91			

It will be seen from the above table that the birth rate for 1913 shews a slight increase over the previous year.

Taking the figures for the past 31 years, the birth rate shews an alarming and persistent decline, more clearly demonstrated by comparing the average rates for successive periods of five years, as illustrated in the table below.

Period of 5 Years			Average Birth Rate
1882-1886	...	...	36.0
1887-1891	...	...	33.98
1892-1896	...	...	29.34
1897-1901	...	...	27.31
1902-1906	..	...	25.22
1907-1911	...	...	23.87
1912-1913 (2 years)	...	...	22.18

The table below gives the birth rates for Oswaldtwistle, and those of the County of Lancashire, and England and Wales respectively, during the eight years—1906-1913 inclusive.

Birth Rate per 1000 of the Population.

	1906	1907	1908	1909	1910	1911	1912	1913
England and Wales	27.0	26.3	26.5	25.6	24.8	24.4	23.8	23.9
County of Lancashire	24.99	24.23	24.86	23.57	22.48	22.64	22.00	—
Oswaldtwistle	25.98	25.40	25.26	23.60	21.78	23.34	21.99	22.38

Birth Rate per 1000 of the Population.

	1891-5	1896-1900	1901-5	1906-10	1911	1912
England and Wales	30.46	29.39	28.12	26.0	24.4	23.8
County of Lancashire	30.51	27.73	26.16	24.02	22.64	22.00
Oswaldtwistle	29.73	28.29	25.35	22.20	23.34	21.99

Deaths. By order of the Registrar General, from and after Jany. 1st, 1911, all deaths of persons who, having a fixed or usual residence, die in a district other than that in which they resided, are to be transferred to the district of residence.

Transferable deaths include :—

(1) Persons dying in institutions for the sick or infirm: such as hospitals, lunatic asylums, workhouses, and nursing homes (but not almshouses,) must be regarded as residents of the district in which they had a fixed or usual residence at the time of admission. If the person dying in an institution had no fixed residence at the time of admission, the death is not transferable. If the patient has been directly transferred from one such institution to another, the death is transferable to the district of residence at the time of admission to the first institution.

(2) The death of infants born and dying within a year of birth in an institution to which the mother was admitted for her confinement, must be referred to the district of fixed or usual residence of the parent.

(3) Deaths from violence are to be referred *(a)* to the district of residence under general rule above; *(b)* if this district is unknown, or the deceased had no fixed abode, to the district where the accident occurred, if known; *(c)* failing this to the district where the death occurred, if known, and *(d)* failing this to the district where the body was found.

Under this scheme 27 deaths were transferred to or from this district as shown below.

240 deaths were registered in the district—121 males and 119 females—giving a "crude" annual death rate of 14.96 per 1000, compared with 183 deaths, and a "crude" annual death rate of 11.53 per 1000 in the previous year. Of these deaths 6—2 males and 4 females—were "non-residents" and have been transferred to their respective districts, viz :—

Bolton ...	1	Darwen ...	1
Bethesda ...	1	Liverpool ...	1
Accrington ...	2		

21 "residents"—14 males and 7 females—died outside the district as follows:—

Blackburn Infirmary ...	3	County Asylum, Winwick	1
Blackburn Workhouse ...	8	Bull Hill Sanatorium, Darwen ...	1
Accrington Hospital ...	4	Blackpool ...	1
County Asylum, Whittingham	2		
Rishton	1		

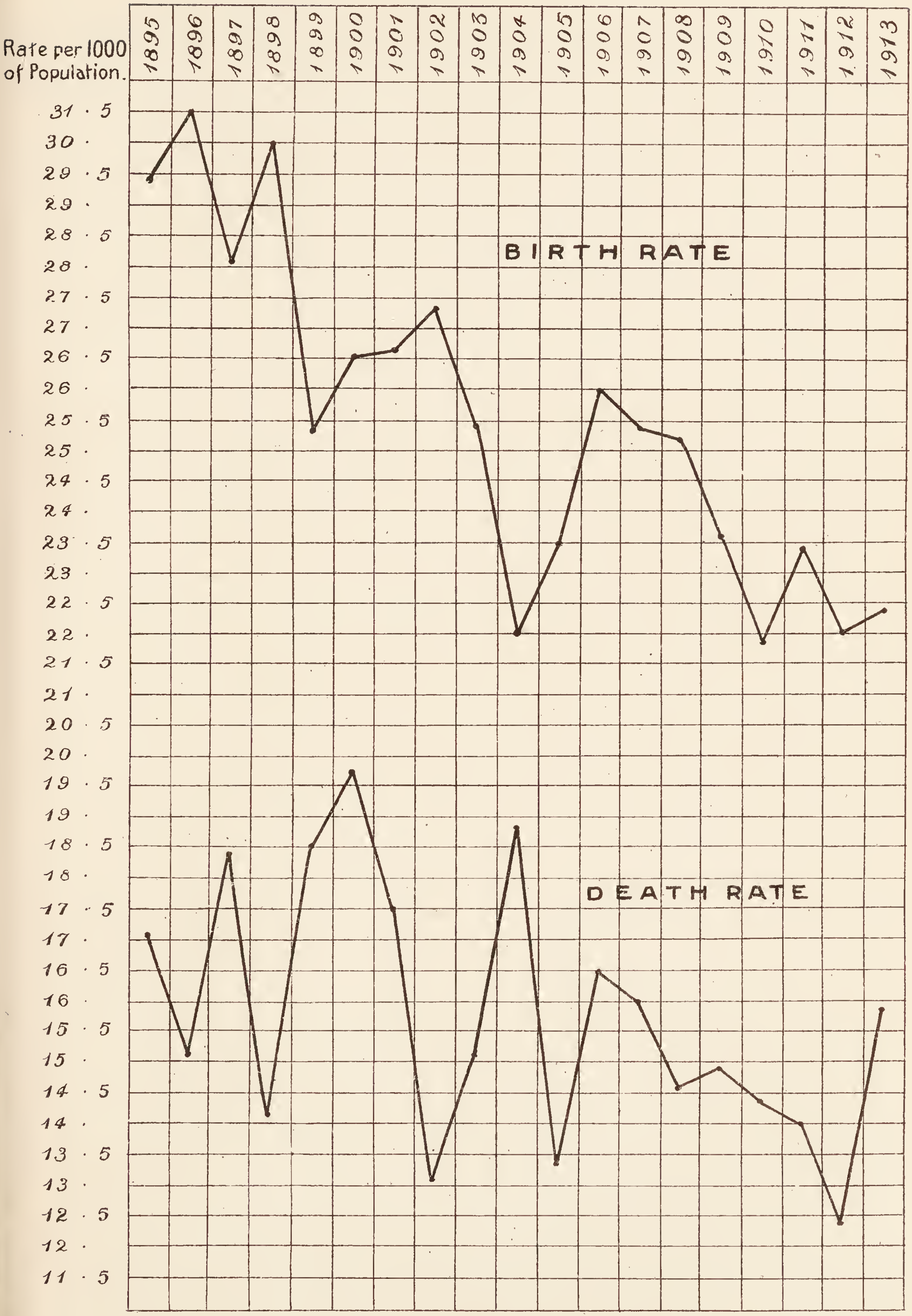
Therefore the net number of deaths of "residents" is 255—133 males and 122 females—compared with 197 in 1912, an increase of 58.

The death rate for the Township, after the above corrections, is 15.89 per 1000 per annum, as against 12.41 per 1000 per annum in the previous year.

Deaths Registered in each Ward (corrected).

1913	Immanuel Ward	Saint Paul's Ward	Foxhill Bank Ward	Saint Oswald's Ward	Saint Michael's Ward	Whole Township.		
						Males	F'mles	Total
Jany.	11	5	5	3	1	16	9	25
Feby.	11	6	4	1	1	7	15	22
March	5	5	13	9	0	14	18	32
April	5	6	5	5	1	12	9	21
May	3	6	6	0	0	7	8	15
June	3	6	7	6	0	11	11	22
July	1	0	7	2	3	7	6	13
August	4	0	5	1	1	3	8	11
Sept.	5	10	8	3	0	14	12	26
October	3	8	8	3	0	15	7	22
Novem.	6	4	3	6	1	12	8	20
Decem.	6	6	5	8	1	15	11	26
Total Deaths	63	62	74	47	9	133	122	255
						Whole Township		
Population	4221	4087	3901	2926	905	16040		
Death Rate	14.92	15.17	18.96	16.06	9.94	15.89		

Chart shewing Birth Rate and Death Rate for years 1895-1913 inclusive.



The following table gives the comparative death rates for England and Wales, the County of Lancashire, and Oswaldtwistle, for the years indicated.

Death Rate per 1000 of the Population.

	1906	1907	1908	1909	1910	1911	1912	1913
England and Wales	15.4	15.0	14.7	14.5	13.4	14.6	13.0	13.7
County of Lancashire	14.62	14.40	14.45	13.96	12.73	15.05	13.61	—
Oswaldtwistle	16.46	16.08	14.66	14.86	14.45	14.05	12.41	15.89

Death Rate per 1000 of the Population.

	1891-95	1896-1900	1901-5	1906-10	1911	1912
England and Wales	18.7	17.74	16.0	14.6	14.6	13.0
County of Lancashire	19.07	17.24	15.32	14.03	15.05	13.61
Oswaldtwistle	17.21	17.22	15.59	15.30	14.05	12.41

Table showing Births, Deaths, and Natural Increase during the last Nineteen Years.

Year	No. of Births	Rate per 1000	No. of Deaths	Rate per 1000	Natural Increase
1895	419	29.33	241	17.2	178
1896	448	31.54	216	15.21	232
1897	422	28.13	275	18.33	147
1898	465	30.00	222	14.32	243
1899	392	25.29	287	18.51	105
1900	411	26.51	306	19.74	105
1901	386	26.62	254	17.52	132
1902	398	27.44	192	13.2	206
1903	392	25.48	222	15.2	170
1904	320	21.91	274	18.76	46
1905	344	23.56	194	13.29	150
1906	382	25.98	242	16.46	140
1907	377	25.40	238	16.08	139
1908	379	25.26	220	14.66	159
1909	354	23.60	223	14.86	131
1910	330	21.78	219	14.45	111
1911	367	23.34	221	14.05	146
1912	349	21.99	197	12.41	152
1913	359	22.38	255	15.89	104

Table shewing Causes of, and Ages at Death during the Year 1913.

Net Deaths at the subjoined ages of "Residents" whether occurring within or without the District. *(a)*

	Causes of Death 1	All ages 2	Under 1 year 3	1 and under 2 years 4	2 and under 5 years 5	5 and under 15 years 6	15 and under 25 years 7	25 and under 45 years 8	45 and under 65 years 9	65 and upwards 10
All causes	Certified *(b)*	248	52	14	5	5	10	25	70	67
	Uncertified	7	4	0	0	0	0	1	1	1
1	Enteric Fever	0	0	0	0	0	0	0	0	0
2	Smallpox	0	0	0	0	0	0	0	0	0
3	Measles	0	0	0	0	0	0	0	0	0
4	Scarlet Fever	0	0	0	0	0	0	0	0	0
5	Whooping Cough	0	0	0	0	0	0	0	0	0
6	Diphtheria and Croup	1	0	1	0	0	0	0	0	0
7	Influenza	4	0	0	0	0	0	0	2	2
8	Erysipelas	1	0	0	0	0	0	0	1	0
9	Phthisis (Pulmonary Tuberculosis) ...	11	0	1	0	1	2	1	6	0
10	Tuberculous Meningitis ...	1	1	0	0	0	0	0	0	0
11	Other Tuberculous Diseases ...	1	0	0	0	0	1	0	0	0
12	Cancer, Malignant disease ...	17	0	0	0	0	0	2	12	3
13	Rheumatic Fever	1	0	0	0	0	0	1	0	0
14	Meningitis (*see note c*) ...	3	0	2	1	0	0	0	0	0
15	Organic Heart Disease ...	22	0	0	0	1	3	3	8	7
16	Bronchitis ...	25	6	3	1	0	0	1	6	8
17	Pneumonia (all forms) ...	10	2	2	1	0	0	3	1	1
18	Other diseases of Respiratory Organs ...	3	0	0	0	0	0	0	3	0
19	Diarrhœa and Enteritis (*see note d*) ...	21	13	5	1	1	0	0	0	1
20	Appendicitis and Typhlitis ...	0	0	0	0	0	0	0	0	0
21	Cirrhosis of Liver ...	4	0	0	0	0	0	1	3	0

21a	Alcoholism ...	0	0	0	0	0	0	0	0	0
22	Nephritis and Bright's Disease ...	11	0	0	0	0	2	2	6	1
23	Puerperal Fever ...	0	0	0	0	0	0	0	0	0
24	Other accidents and diseases of Pregnancy and Parturition ...	2	0	0	0	0	1	1	0	0
25	Congenital Debility & Malformation including Premature Birth ...	20	20	0	0	0	0	0	0	0
26	Violent Deaths, excluding Suicide ...	10	1	0	1	1	0	0	4	3
27	Suicide ..	2	0	0	0	0	0	1	1	0
28	Other defined diseases ...	76	9	0	0	1	1	9	17	39
	Diseases ill-defined or unknown ...	2	0	0	0	0	0	0	0	2
	Totals—All causes ...	248	52	14	5	5	10	25	70	67
	Sub-Entries included in above figures—									
14 (*a*).	Cerebro-Spinal Meningitis	0	0	0	0	0	0	0	0	0
28 (*a*)	Poliomyelitis	0	0	0	0	0	0	0	0	0
17 (*a*)	Pneumonia other than Broncho-Pneumonia	8	2	0	1	0	0	3	1	1

NOTES TO TABLE.

The classification and numbering of Causes of Death are those of the "Short List" on page XXV of the Manual of the International List of Causes of Death.

(*a*) All "Transferable Deaths" of residents, *i e.*, of persons resident in the district who have died outside it, are *included* with the other deaths in columns 2-10. Transferable deaths of non-residents, *i.e.*, of persons resident elsewhere in England and Wales who have died in the district, are in like manner *excluded* from these columns. For the precise meaning of the term "transferable deaths" *see* notes on pages 13 and 14.

(*b*) All deaths certified by registered Medical Practitioners and all inquest cases are classed as "Certified;" all other deaths are regarded as "Uncertified."

(*c*) Exclusive of "Tuberculous Meningitis" (10), but inclusive of Cerebro-Spinal Meningitis

(*d*) Title 19 is used for deaths from Diarrhœa and Enteritis at all ages. (In the "Short List" deaths from Diarrhœa and Enteritis under 2 years are included under Title 19; those at 2 years and over being placed under Title 28.)

Table showing the causes of Deaths during the last 15 years.

Causes of Death		1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Smallpox	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Measles	...	1	20	1	1	1	27	0	13	6	2	0	11	2	2	0
Scarlet Fever	...	3	5	4	1	3	0	1	0	1	0	1	0	2	1	0
Whooping Cough	...	3	0	4	3	0	2	1	4	0	0	1	3	3	0	0
Diphtheria and Membranous Croup		1	5	12	5	0	0	1	0.	3	4	2	1	6	5	1
Typhus Fever	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Typhoid Fever	...	3	1	3	1	2	7	3	3	1	3	2	2	2	4	0
Other continued Fever	...	—	—	—	—	—	0	0	0	0	0	0	0	0	0	0
Epidemic Influenza	...	—	—	1	2	—	2	2	1	3	4	4	3	2	0	4
Cholera	...	—	—	—	—	—	0	0	0	0	0	0	0	0	0	0
Plague	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diarrhœa	...	8	5	7	1	3	3	5	18	2	10	6	8	16	4	21
Enteritis	...	—	—	1	9	10	1	6	9	10	6	2	6			
Puerperal Fever	...	1	1	0	0	0	0	1	0	4	1	0	0	0	0	0
Erysipelas	...	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1

Phthisis (Pulmonary Tuberculosis)	11	15	9	11	11	14	6	9	12	9	6	10	10	7	11
Other Tubercular diseases ...	—	—	19	14	6	13	12	15	11	6	5	6	1	6	2
Cancer (Malignant diseases)	—	—	10	5	7	11	16	12	15	19	9	18	12	13	17
Bronchitis ...	—	—	29	18	28	38	27	21	33	25	35	37	24	23	25
Pneumonia ...	—	—	22	12	12	21	13	19	16	10	14	3	19	8	10
Pleurisy ...	—	—	1	1	—	0	0	0	0	0	0	0	3	3	3
Other diseases of Respiratory organs	—	—	—	1	4	3	1	5	2	1	0	4			
Alcoholism & Cirrhosis of Liver	—	—	1	3	8	2	2	1	2	3	1	0	0	1	4
Premature birth (including Malformations and Congenital Debility) ...	—	—	10	6	6	7	11	9	5	8	5	6	11	15	20
Diseases and accidents of Parturition	—	—	2	6	3	5	3	2	1	2	1	2	2	3	2
Heart disease ...	21	9	10	12	18	13	13	15	27	15	18	10	—	21	22
Accidents ...	5	7	5	4	5	8	4	6	7	3	6	8	9	6	10
Suicides ...	—	—	2	—	3	4	3	2	1	3	1	4	1	1	2
All other causes ...	230	237	101	76	92	93	62	77	76	86	102	77	96	74	100
All causes ...	287	306	254	192	222	274	194	242	238	220	223	219	221	197	255

INFANTILE MORTALITY.

Net Deaths from stated causes at various Ages under 1 Year of Age.

CAUSE OF DEATH		Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 1 month	1-3 months	3-6 months	6-9 months	9-12 months	Total Deaths under 1 Year
All causes	Certified	14	2	3	1	20	7	11	10	4	52
	Uncertified	2	0	0	0	2	0	2	0	0	4
Smallpox		0	0	0	0	0	0	0	0	0	0
Chickenpox		0	0	0	0	0	0	0	0	0	0
Measles		0	0	0	0	0	0	0	0	0	0
Scarlet Fever		0	0	0	0	0	0	0	0	0	0
Whooping Cough		0	0	0	0	0	0	0	0	0	0
Diphtheria and Croup		0	0	0	0	0	0	0	0	0	0
Erysipelas		0	0	0	0	0	0	0	0	0	0
Tuberculous Meningitis		0	0	0	0	0	0	1	0	0	1
Abdominal Tuberculosis *(a)*		0	0	0	0	0	0	0	0	0	0
Other Tuberculous Diseases		0	0	0	0	0	0	0	0	0	0
Meningitis *(not Tuberculous)*		0	0	0	0	0	0	0	0	0	0
Convulsions		2	0	1	0	3	1	0	0	1	5
Laryngitis		0	0	0	0	0	0	0	0	0	0

Bronchitis	0	0	0	0	0	0	2	2	2	6
Pneumonia (all forms)	0	0	0	0	0	0	1	1	0	2
Diarrhœa	0	0	0	0	0	2	5	4	1	12
Enteritis	0	0	0	0	0	1	0	0	0	1
Gastritis	0	0	0	1	1	0	0	1	0	2
Syphilis	0	0	0	0	0	0	0	0	0	0
Rickets	0	0	0	0	0	0	0	0	0	0
Suffocation, overlying	0	0	0	0	0	0	0	0	0	0
Injury at Birth	1	0	0	0	1	0	0	0	0	1
Atelectasis	0	0	0	0	0	0	0	0	0	0
Congenital Malformations ...	0	0	1	0	1	0	0	0	0	1
Premature Birth	9	1	0	0	10	1	0	0	0	11
Atrophy, Debility and Marasmus *(b)* ...	1	1	1	0	3	2	2	1	0	8
Other causes	1	0	0	0	1	0	0	1	0	2
	14	2	3	1	20	7	11	10	4	52

Net births in the year { legitimate 340. / illegitimate 19.

Net deaths in the year of { legitimate infants 46. / illegitimate infants 6.

(a) Under Abdominal Tuberculosis are included deaths from Tuberculous Peritonitis and Enteritis, and from Tabes Mesenterica.

(b) Want of breast milk is included under Atrophy and Debility.

(c) For references to the meaning of any other headings *see* notes attached to Table on pages 16 and 17.

Infantile Death Rate. As will be seen from the tables above, 56 deaths were registered of children under 1 year of age, representing for the year 157.38 deaths per 1000 births, compared with 38 deaths and a mortality of 108.88 per 1000 births in the previous year, and an average of 49.1 deaths and an average mortality of 136.78 per 1000 births for the 10 years 1903-1912 inclusive.

An analysis of the 56 deaths of infants, as given in the table on pages 20 & 21, shows that no less than 20 were due to various congenital defects, including premature birth, 8 were due to bronchitis and pneumonia, 12 diarrhœal diseases. The common infectious diseases caused no deaths, but 1 occurred from tuberculosis; the remaining causes of death are given in the tables.

The following table shows the death rate amongst infants during the last nineteen years.

Table of Infantile Death Rate for the last Nineteen Years.

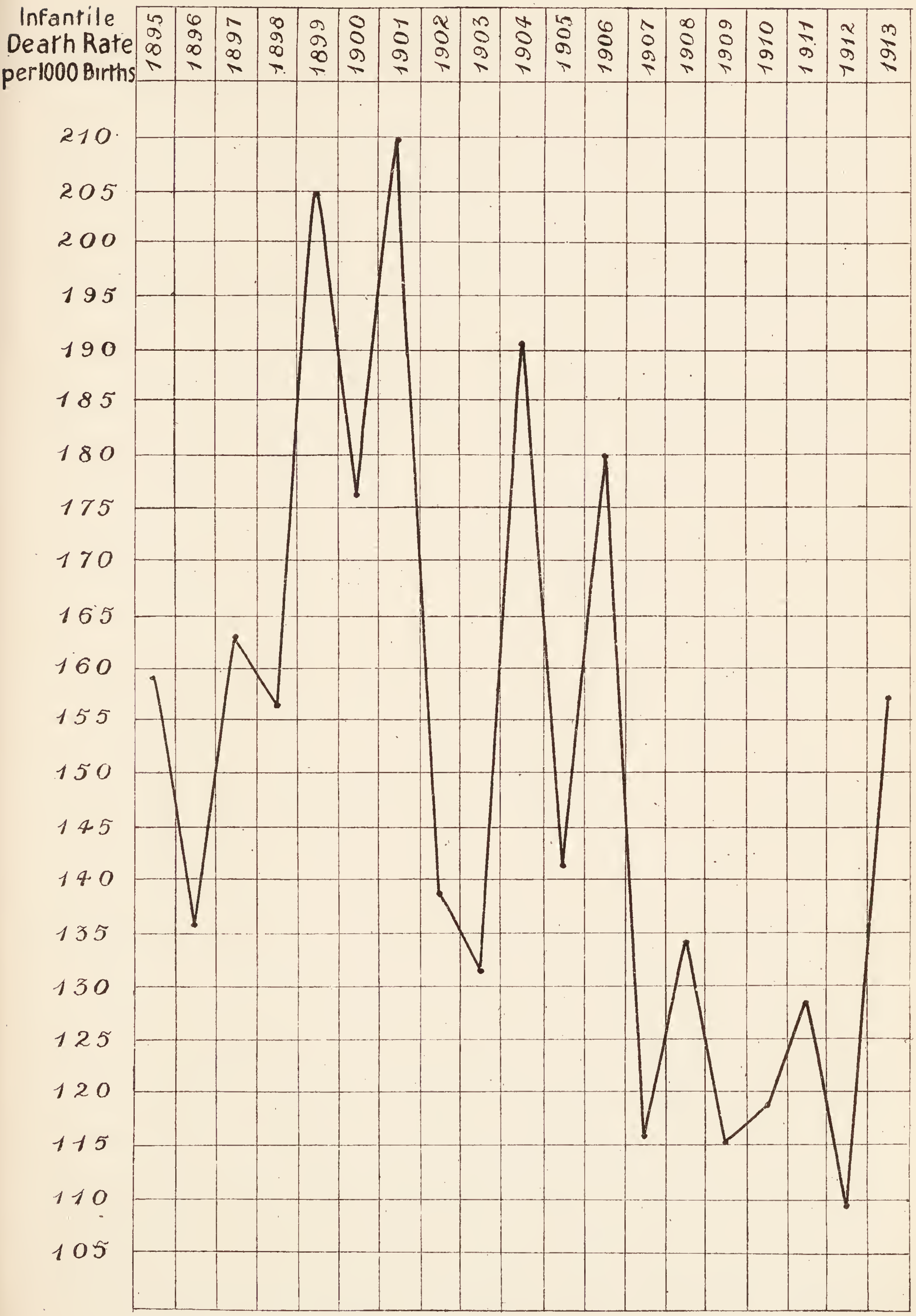
Year	No. of Deaths	Deaths to 1000 Births	Average for periods of 5 years	Year	No. of Deaths	Deaths to 1000 Births	Average for period of 5 years
1895	67	159	163.6	1905	49	142	137.94
1896	61	136		1906	69	180.62	
1897	92	163		1907	44	116.71	
1898	73	156		1908	51	134.56	
1899	80	204		1909	41	115.81	
1900	73	177	169.6	1910	39	118.18	128.12 (4 years)
1901	81	210		1911	47	128.06	
1902	55	138		1912	38	108.88	
1903	52	132		1913	56	157.38	
1904	61	191					

The following table gives the infant death rates for England and Wales, the County of Lancashire, and of Oswaldtwistle, for the years indicated.

Deaths of Children under 1 year per 1000 births.

	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
England and Wales ...	132	146	128	133	118	121	109	106	130	95
Lancashire ..	140	157	132	139	125	131	115	117	144	104
Oswaldtw'tle	132	191	142	180	116	134	115	118	128	108

Diagram shewing the Infantile Death Rate per 1000 Births during the years 1895-1913 inclusive.



Vital Statistics of Whole District during 1913 and previous Years.

Year	Population estimated to Middle of each Year	Births			Total Deaths Registered in the District		Transferable Deaths‡		Net Deaths belonging to the District			
		Un-corrected Number	Net				Of Non-residents register'd in the District	Of Residents not register'd in the District	Under 1 year		At all ages	
			Number	Rate	Number *	Rate			Number *	Rate per 1000 net Births	Number *	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
1907	14800	377	—	25.40	219	14.79	—	—	—	—	238	16.08
1908	15000	379	—	25.26	205	13.66	—	—	—	—	220	14.66
1909	15000	354	—	23.60	203	13.53	—	—	—	—	223	14.86
1910	15150	330	—	21.78	206	13.59	—	—	—	—	219	14.45
1911	15720	367	367	23.34	204	12.97	3	20	47	128.06	221	14.05
1912	15870	348	349	21.99	183	11.53	1	15	38	108.88	197	12.41
1913	16040	358	359	22.38	240	14.96	6	21	56	157.38	255	15.89

Notes.—This Table is arranged to show the gross births and deaths in the district, and the births and deaths properly belonging to it with the corresponding rates. For years before 1911 some of the corrected rates are not available. The rates are calculated per 1000 of the estimated gross population.

* In column 6 are included the whole of the deaths registered during the year as having actually occurred within the district.

In column 12 is entered the number in column 6, corrected by subtraction of the number in column 8 and by addition of the number in column 9. Deaths in column 10 are similarly corrected by subtraction of the deaths under 1, included in the number given in column 8, and by addition of the deaths under 1 included in the number given in column 9.

‡ "Transferable Deaths" are deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided. The following special cases arise as to Transferable Deaths:—

(1) Persons dying in Institutions for the sick or infirm, such as hospitals, lunatic asylums, workhouses, and nursing homes (but not almshouses) must be regarded as residents of the district in which they had a fixed or usual residence at the time of admission. If the person dying in an Institution had no fixed residence at the time of admission, the death is not transferable. If the patient has been directly transferred from one such Institution to another, the death is transferable to the district of residence at the time of admission to the first Institution.

(2) The deaths of infants born and dying within a year of birth in an Institution to which the mother was admitted for her confinement be referred to the district of fixed or usual residence of the parent.

(3) Deaths from violence are to be referred *(a)* to the district of residence, under the general rule; *(b)* if this district is unknown, or the deceased had no fixed abode, to the district where the accident occurred, if known; *(c)* failing this, to the district where death occurred, if known; and *(d)* failing this, to the district where the body was found.

The Seven Principal Epidemic or Zymotic Diseases, viz. :—Smallpox, measles, scarlet fever, diphtheria and membranous croup, whooping cough, fever (including enteric, typhus, and continued fever), diarrhœa and enteritis, caused 22 deaths, equivalent to a zymotic or epidemic death rate of 1.37 per 1000 per annum, as against 16 deaths and a death rate of 1.00 per 1000 in the previous year, and an average death rate of 1.45 per 1000 in the four years 1909-1912.

The following table shows the number of deaths from these diseases :—

	Deaths 1913	Deaths 1912	Deaths 1911	Deaths 1910	Deaths 1909
Smallpox ...	0	0	0	0	0
Measles ...	0	2	2	11	0
Scarlet Fever ...	0	1	0	0	1
Diphtheria and Croup	1	5	6	1	2
Enteric Fever	0	4	2	2	2
Whooping Cough	0	0	3	3	1
Diarrhœa and Enteritis	21	4	16	14	8
Total	22	16	29	31	14

Table of Zymotic Death Rate for the last Five Years.

Year		Deaths per 1000	Year		Deaths per 1000
1909	...	0.93	1912	...	1.00
1910	...	2.04	1913	...	1.37
1911	...	1.84			

Cases of Infectious Disease notified during the Year 1913.

Notifiable Disease	Number of cases notified—At Ages—Years.								Total cases notified in each Ward of the District.					
	At all ages	Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and up-wards	Immanuel Ward	Saint Paul's Ward	Foxhill Bank Ward	Saint Oswald's Ward	Saint Mich'l's Ward	Total cases removed to Hospital
Smallpox ...	1	0	0	0	1	0	0	0	0	0	0	1	0	1
Cholera ...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plague ...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria, including Membranous Croup	8	0	3	0	3	2	0	0	3	1	3	1	0	0
Erysipelas ...	9	0	0	0	2	3	3	1	2	5	1	1	0	0
Scarlet Fever	44	0	8	28	6	2	0	0	22	5	8	8	1	0
Typhus Fever ...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enteric Fever ...	2	0	0	1	1	0	0	0	2	0	0	0	0	0
Relapsing Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Continued Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Puerperal Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cerebro-Spinal Meningitis	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Poliomyelitis ...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pulmonary Tuberculosis	21	0	1	1	4	8	7	0	4	4	8	5	0	0
Other forms of Tuberculosis	5	0	0	1	3	1	0	0	1	1	2	1	0	0
Ophthalmia Neonatorum	4	4	0	0	0	0	0	0	0	1	3	0	0	0
Totals	94	4	12	31	20	16	10	1	34	17	25	17	1	1

Ophthalmia neonatorum was added to the list of notifiable diseases on June 1st, 1910. In February of the same year the question of adding glanders, anthrax, and hydrophobia in man was discussed, but was not adopted.

In April, 1912, acute poliomyelitis and cerebro-spinal fever were added to the list of notifiable diseases.

Smallpox. One case was notified in the month of January, in Saint Oswald's Ward. As stated in a special report submitted to the Health Committee in February, the case was a youth 20 years of age, and the source of the contact was not traced. He was a marine store dealer and rag merchant, and he and his father were in the habit of visiting different towns in the course of business, staying at model lodging houses for one or two nights and then moving on. He was removed the same day as notified to the Council's Smallpox Hospital. All the other inmates of the house, ten in number, were vaccinated, and no further cases occurred.

Cases of Smallpox and Deaths therefrom during the last 21 Years.

Year	Cases	Deaths
1893	18	?
1894	3	0
1895	0	0
1896	0	0
1897	0	0
1898	0	0
1899	0	0
1900	0	0
1901	0	0
1902	1	0
1903	2	0
1904	0	0
1905	1	0
1906	0	0
1907	0	0
1908	0	0
1909	0	0
1910	0	0
1911	0	0
1912	0	0
1913	1	0

Mr. G. G. Dickinson, Vaccination Officer for the Blackburn Union, has kindly supplied me with the figures in the table below, shewing particulars of vaccinations performed in the Township during the two years 1912-13. From this table it will be seen that there is a large and increasing number of unvaccinated children in the community, the vaccinations in each year being less than one-third the total births.

The country is at present very free from smallpox, but how long we are to enjoy this freedom it is difficult to say; the yearly increasing proportion of unvaccinated persons is undoubtedly a serious matter, and I fear that when the disease does again appear in epidemic form, as I have no doubt it will, the country will have a rude awakening. In many countries in the continent of Europe smallpox is at present prevalent, especially Russia, Italy, France, Spain, and Turkey, while in Canada and the United States the disease is widespread. In 110 cities in the United States 3,780 cases were notified during the first eleven months of the year 1913, and in 30 States 17,886 cases occurred during the same period. When it is remembered that a person could become infected in any of these districts and arrive in England before shewing symptons of the disease, it is easily seen how the seeds of another great epidemic can be sown.

It is mainly due to the vigilance of the Port Sanitary Authorities that cases are discovered and isolated on their arrival at these shores.

Vaccination Summary of Births Registered in the Oswaldtwistle District of the Blackburn Union for 2 years, viz:—January 1st, 1912, to December 31st, 1913.

1912	Total Births	Vaccinated	Exemptions	Removals not traced	Removals traced out of the District	Insusceptible	Postponements	Unaccounted for not Vaccinated	Died unvaccinated
January	38	11	24	0	0	0	0	0	3
February	29	9	15	1	0	0	0	0	4
March	27	15	10	0	0	0	0	0	2
April	28	8	18	0	0	0	0	0	2
May	23	6	16	1	0	0	0	0	0
June	30	10	18	0	0	0	1	0	1
July	26	8	15	0	0	0	0	2	1
August	34	14	17	0	0	0	2	0	1
September	25	9	13	0	0	0	1	1	1
October	20	5	10	0	0	0	1	1	3
November	29	4	16	0	0	0	0	0	9
December	39	6	28	1	0	0	0	0	4
Totals	348	105	200	3	nil	nil	5	4	31

1913									
January	27	9	13	0	0	0	1	0	4
February	32	7	15	0	0	0	0	1	9
March	27	10	12	0	0	0	0	1	4
April	32	9	18	1	0	0	1	2	1
May	30	11	16	0	0	0	0	1	2
June	45	19	19	0	0	0	0	1	6
July	21	6	9	0	0	0	0	2	4
August	32	10	15	0	0	0	0	3	4
September	25	3	10	0	0	0	0	8	4
October	40	2	24	0	0	0	0	13	1
November	24	2	9	0	0	0	0	10	3
December	27	0	4	0	0	0	0	23	0
Totals	362	88	164	1	0	0	2	65	42

Diphtheria. 8 cases were notified and 1 ended fatally, compared with 27 cases and 5 deaths in 1912.

The disease was reported in five months out of the twelve, as follows :—

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	0	3	1	0	0	0	0	1	0	0	2

Table of cases of Diphtheria, and Deaths therefrom, during the last Sixteen Years.

Year	Cases Notified	Deaths	Year	Cases Notified	Deaths
1898	4	1	1906	10	0
1899	—	1	1907	10	3
1900	—	5	1908	35	4
1901	30	12	1909	11	2
1902	14	5	1910	15	1
1903	6	0	1911	12	6
1904	3	0	1912	27	5
1905	4	1	1913	8	1

"The Diphtheria Anti-Toxin (Outside London) Order, 1910," has not been adopted.

Erysipelas. Nine cases were notified and one death resulted, compared with six cases and no deaths in the previous year.

It was reported in six out of the twelve months as follows :

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
2	2	0	2	0	1	0	0	1	1	0	0

Table of cases of Erysipelas notified, and Deaths therefrom, during the last Thirteen Years.

Year	Cases Notified	Deaths	Year	Cases Notified	Deaths
1901	10	0	1908	8	0
1902	6	0	1909	9	0
1903	9	0	1910	7	0
1904	8	0	1911	9	0
1905	13	1	1912	6	0
1906	14	0	1913	9	1
1907	10	0			

Scarlet Fever. 44 cases of this disease occurred, none of which resulted fatally, compared with 74 cases and one death in 1912.

The following table shows the number of cases reported in each month :—

Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	3	3	7	5	0	2	1	3	4	3	8

Table of cases of Scarlet Fever notified, and Deaths therefrom, during the last Sixteen Years.

Year	Cases Notified	Deaths	Year	Cases Notified	Deaths
1898	13	0	1906	40	0
1899	94	3	1907	22	1
1900	—	5	1908	12	0
1901	71	4	1909	96	1
1902	45	1	1910	63	0
1903	35	3	1911	29	0
1904	16	0	1912	74	1
1905	40	1	1913	44	0

In the month of April I had to report to the Health Committee a case of a parent allowing his child suffering from scarlet fever to be exposed to the danger of the public, and the Clerk was directed to warn the parent that unless the child was kept isolated legal proceedings would be taken at once. No further action was necessary.

Typhoid or Enteric Fever. Two cases of this disease were notified, none proving fatal, compared with seven cases and four deaths in the previous year.

One case occurred in January and one in September.

Table of cases of Typhoid Fever notified, and Deaths therefrom, during the last Sixteen Years.

Year	Cases Notified	Deaths	Year	Cases Notified	Deaths
1898	27	7	1906	11	3
1899	16	3	1907	4	1
1900	—	1	1908	7	3
1901	9	3	1909	9	2
1902	9	1	1910	12	2
1903	7	2	1911	9	2
1904	14	7	1912	7	4
1905	9	3	1913	2	0

Puerperal Fever. No cases of this disease were reported.

I have no doubt that the absence of puerperal fever of late years is due in great measure to the vigilance of the Lady Inspector to the Midwives' Board, in seeing that the midwives exercise greater care and cleanliness in their work, as well as in their dwellings.

On December 31st, 1913, there were five midwives under the Midwives' Act, 1902, residing in the Township. Two only of these are properly trained, and certificated by examination, the rest having their names on the County Register by virtue of their having been practising before the passing of the Act. I also received notification from a Blackburn midwife of her intention to practise in this district during the year.

Table of cases of Puerperal Fever notified, and Deaths therefrom, during the last Eleven Years.

Year	Cases Notified	Deaths	Year	Case Notified	Deaths
1903	0	0	1909	0	0
1904	1	0	1910	0	0
1905	2	1	1911	0	0
1906	1	0	1912	1	0
1907	6	4	1913	0	0
1908	1	1			

Measles. The district has been very free from this disease during the year and no deaths have resulted from it, but an extensive outbreak of German measles or Rotheln occurred, and was more or less in evidence throughout the whole of the built up portion of the Township during the midsummer months.

Table of Deaths from Measles for the last Sixteen Years.

Year	Deaths	Year	Deaths
1898	0	1906	13
1899	1	1907	6
1900	20	1908	2
1901	1	1909	0
1902	1	1910	11
1903	1	1911	2
1904	27	1912	2
1905	0	1913	0

Whooping Cough. The disease not being notifiable, it is impossible to estimate the number of cases which occurred, but I think it is safe to say that the Township during the year under review has been practically free from this distressing illness, and no deaths occurred.

Table of Deaths from Whooping Cough for the last Sixteen Years.

Year	Deaths	Year	Deaths
1898	0	1906	4
1899	3	1907	0
1900	0	1908	0
1901	4	1909	1
1902	3	1910	3
1903	0	1911	3
1904	2	1912	0
1905	1	1913	0

Diarrhœa and Enteritis have caused 21 deaths, 13 being in children under 1 year of age.

Table of Deaths from Diarrhœa and Enteritis for the last Five Years.

Year	Deaths	Year	Deaths
1909	8	1912	4
1910	14	1913	21
1911	16		

Comparative Table shewing incidence of Infectious Diseases in various localities during the year 1913.

DISTRICT	Estimated Population in the middle of 1912	Small-pox		Scarlet Fever		Diphtheria		Enteric Fever		Puerperal Fever		Erysipelas	
		cases	rate	cases	rate	cases	rate	cases	rate	cases	rate	cases	rate
England & Wales	36539636	90	0.00	130626	3.57	50850	1.39	8117	0.22	1989	0.05	23114	0.63
London ..	4519754	3	0.00	17568	3.89	7668	1.70	762	0.17	354	0.08	4159	0.92
Cheshire ..	605381	1	0.00	1483	2.45	949	1.57	153	0.25	24	0.04	325	0.54
Essex ..	1094323	4	0.00	2732	2.50	1548	1.41	186	0.17	63	0.06	640	0.58
Kent ..	1032184	1	0.00	2521	2.44	1766	1.71	203	0.20	39	0.04	545	0.53
Lancashire ..	1741497	10	0.01	4824	2.77	1519	0.87	869	0.50	104	0.06	998	0.57
Norfolk ..	32313	1	0.00	609	1.88	233	0.72	73	0.23	7	0.02	104	0.32
Northamptonshire ..	214560	1	0.00	799	3.72	233	1.09	46	0-21	7	0.03	109	0.51
Northumberland ..	380313	1	0.00	2369	6.23	657	1.73	177	0.47	5	0.01	256	0.67
Surrey ..	696720	1	0.00	1508	2.16	868	1.25	82	0.12	36	0.05	318	0.46
Sussex—East ..	245291	27	0.11	638	2.60	346	1.41	20	0.08	5	0.02	88	0.36
Wiltshire ..	288865	1	0.00	454	1.57	233	0.81	17	0.06	5	0.02	98	0.34
Yorks.—East Riding	156095		..	247	1.58	142	0.91	25	0.06	5	0.03	73	0.47
,, —North ,,	318585		..	1205	3.81	521	1.65	59	0.19	2	0.01	141	0.45
,, —West ,,	1491942	1	0.00	5689	3.81	2081	1.39	509	0.34	64	0.04	995	0.67
Birkenhead ..	133427	1	0.00	545	4.08	143	1.07	19	0.14	10	0.07	66	0.49
Birmingham, City of	850947		..	8675	10.19	1205	1.42	113	0.13	90	0.11	808	0.95

Blackburn ..	133560		..	268	2.01	80	0.60	31	0.23	8	0.06	91	0.68
Blackpool ..	59831		..	104	1.74	45	0.75	16	0.27	6	0.10	24	0.40
Bolton ..	182524		..	209	1.15	124	0.61	56	0.31	4	0.02	71	0.39
Burnley ..	108012		..	206	1.91	178	1.65	20	0.19	6	0.06	175	1.62
Bury ..	59106		..	299	5.06	68	1.15	8	0.14	6	0.10	28	0.47
Liverpool, City of ..	752021	3	0.00	2228	2.96	1030	1.37	122	0.16	52	0.07	767	1.02
Manchester, City of	723531	1	0.00	3901	5.39	732	1.01	327	0.45	134	0.19	437	0.60
Oldham ..	148839	8	00.5	938	6.30	93	0.62	14	0.09	11	0.07	121	0.81
Preston ..	117631		..	777	6.61	280	2.38	47	0.40	7	0.06	108	0.92
Salford ..	232734	4	0.02	1235	5.31	335	1.44	112	0.48	17	0.07	203	0.87
Sheffield, City of ..	466408		..	3582	7.68	841	1.80	57	0.16	57	0.12	486	1.04
Southport ..	70444		..	89	1.26	40	0.57	2	0.06	2	0.03	35	0.50
Lytham ..	9765		..	15	1.54	7	0.72		0.20		..	1	0.10
Morecambe ..	12175		..	34	2.79	9	0.74		0.08		..	1	0.08
Nelson ..	40361		..	42	1.04	18	0.45	2	0.07	2	0.05	22	0.55
Padiham ..	13824		..	8	0.58	6	0.43	1	0.22	1	0.07	10	0.72
Ramsbottom ..	15044		..	52	3.46	28	1.86	4	2.26	4	0.27	6	0.40
Rawtenstall ..	30445		..	184	6.04	23	0.76	1	0.20	1	0.03	22	0.72
Rishton ..	7495		..	1	0.33	12	1.60		0.40		..	9	1.20
St. Annes on Sea ..	10234		..	10	0.98	37	3.62		..		..	7	0.68
Oswaldtwistle ..	15916	1	0.06	43	2.70	10	0.63		0.13		..	9	0.57

Diseases of the Respiratory Organs, excluding Phthisis, caused 38 deaths, equal to an annual death rate of 2.36 per 1000, as against 34 deaths and an annual death rate of 2.14 per 1000 in the previous year, and an average of 44.8 deaths and an average death rate of 2.95 for the ten years 1903-1912.

Bronchitis accounted for 25 deaths and pneumonia for 10.

Table of Deaths from Respiratory Diseases (excluding Phthisis) in each Month.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
1912	3	4	3	4	4	1	2	3	1	1	2	6	34
1913	5	3	6	5	2	5	0	2	1	1	3	5	38

Table of Death Rates from Respiratory Diseases (excluding Phthisis) for the last Twelve Years.

Year	Deaths	Death Rate	Year	Deaths	Death Rate
1902	32	2.20	1908	36	2.40
1903	44	3.01	1909	49	3.26
1904	62	4.24	1910	40	2.64
1905	41	2.74	1911	46	2.92
1906	45	2.72	1912	34	2.14
1907	51	3.44	1913	38	2.36

Below are the Respiratory death rates per 1000 for the County of Lancashire and for Oswaldtwistle for the years indicated.

	1906	1907	1908	1909	1910	1911	1912
County of Lancashire	2.52	2.90	2.54	2.73	2.12	2.32	2.56
Oswaldtwistle ...	2.72	3.44	2.40	3.26	2.64	2.92	2.14

Phthisis and other Tubercular Diseases. The year 1913 marks an epoch in the history of Public Health Administration. For the first time all forms of tuberculosis were made compulsorily notifiable by order of the Local Government Board, under the Public Health (Tuberculosis)

Regulations, 1912, which revoked the Public Health (Tuberculosis) Regulation, 1908, the Public Health (Tuberculosis in Hospitals) Regulation, 1911, and the Public Health (Tuberculosis) Regulation, 1911.

Further than this the sanatorium benefit provisions of the National Insurance Act came into operation. A million and a half pounds became available for the provision of institutions for the treatment of tuberculosis; and the Government offered to pay one half of the cost of schemes, approved by the Local Government Board, for the treatment of tuberculosis by local authorities, available for the whole population.

The latter part of the scheme is not yet operative, at any rate in this county, but the fact that the first serious attempt has been made to grapple with the question of tuberculosis from a national standpoint, gives hope that in course of time what has been called the "white plague" will be, if not totally eradicated, at any rate reduced to a minimum.

Under the new Public Health Tuberculosis Regulation, the Medical Officer of Health is required, either personally or through someone acting on his behalf, to make enquiries respecting all cases of tuberculosis notified to him, and to take whatever steps may be necessary for investigating the source of infection, for preventing the spread of infection, or removing conditions favourable to infection.

These regulations have been carefully carried out, every case notified having been visited by me and particulars taken and entered in a Record book, which now contains a history more or less complete of all cases which have occurred in the Township during the year.

The Sanitary Inspector has also assisted in the work and attended to structural defects in the houses, supplied disinfectants, and seen to fumigation of the premises in case of death or removal.

Some time ago I advised your Council to provide sputum flasks for the use of persons suffering from tuberculosis of the lungs, but no action was taken. I should therefore again respectfully ask you to consider this matter, and suggest that these articles be now provided; the cost is trifling, and as undoubtedly infection is spread chiefly through the expectoration of "consumptive" cases, the use of a flask will reduce considerably the danger of such persons both to themselves and the public at large.

During the year the total number of notifications received was 38 as follows:—

26 were on Form A—primary notifications.

6 ,, C—admissions to sanatoria.

4 ,, D—discharges from sanatoria.

1 duplicate was received on Form A.

1 was received in error which belonged to Manchester, and was forwarded to that city.

There were no notifications on Form B.

Of the six notifications received on Form C—

2 were admission to Bull Hill Sanatorium.

1 was ,, Felix House ,,

1 was ,, Aitken ,,

2 were ,, Meathop ,,

Table shewing details of Primary Notifications of Tuberculosis.

Ages	Pulmonary			Non-Pulmonary			Pulmonary & Non-Pulmonary		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Under 1 year of age	0	0	0	0	0	0	0	0	0
1 year and under 5 years	0	1	1	0	0	0	1	0	1
5 years ,, 15 ,,	1	0	1	0	1	1	1	1	2
15 ,, ,, 25 ,,	2	2	4	1	2	3	3	4	7
52 ,, ,, 35 ,,	1	2	3	0	1	1	1	3	4
35 ,, ,, 45 ,,	4	1	5	0	0	0	4	1	5
45 ,, ,, 55 ,,	2	0	2	0	0	0	2	0	2
55 ,, ,, 65 ,,	3	2	5	0	0	0	3	2	5
65 and over	0	0	0	0	0	0	0	0	0
Totals ...	13	8	21	1	4	5	15	11	26

The death rates per 1000 from tuberculosis are as follows:—

		Deaths	Death Rate.
Pulmonary tuberculosis	...	11	0.68
Other forms of ,,	...	2	0.12
Total ...	...	13	0.81

The total death rate is exactly the same as last year.

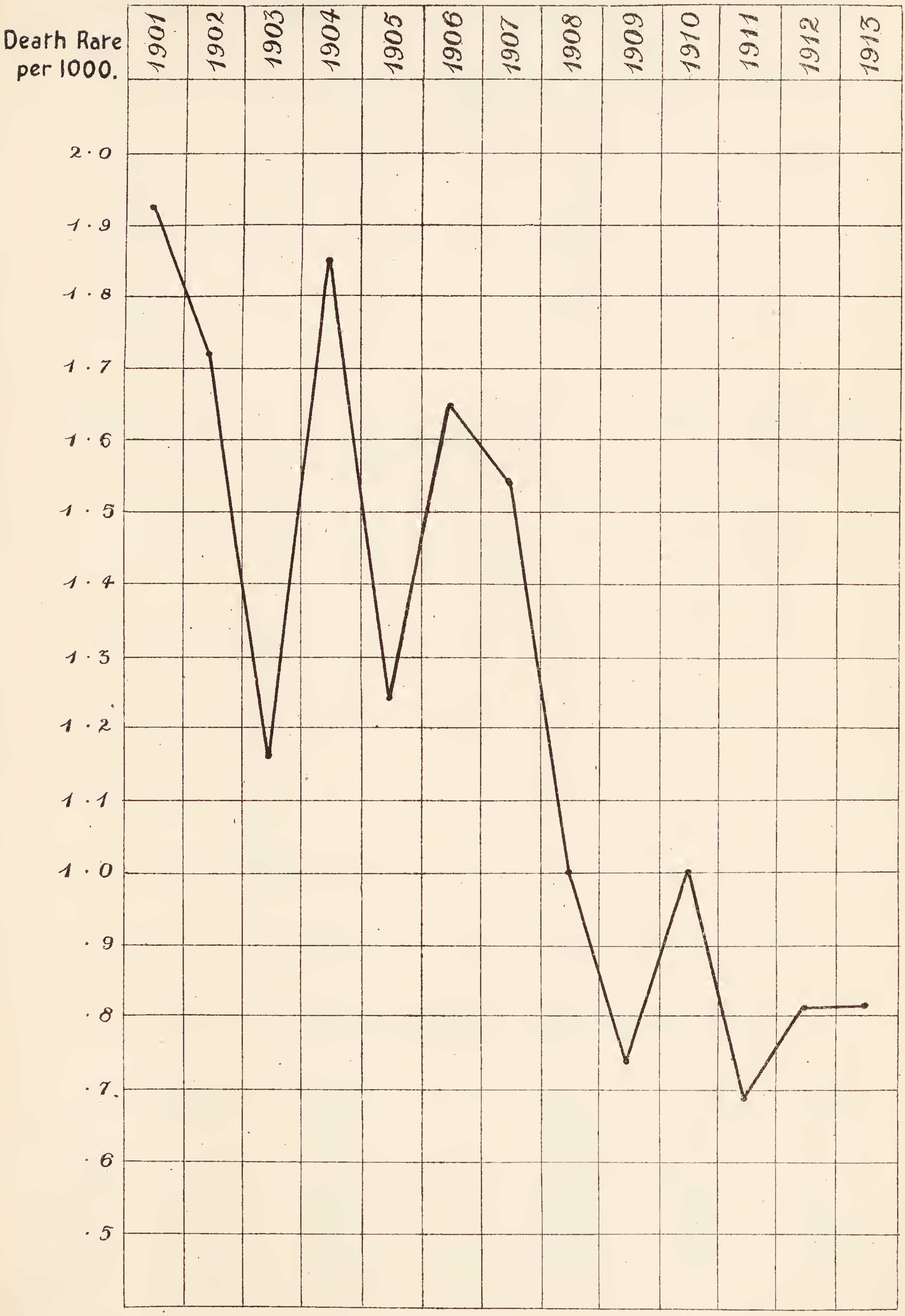
Table of Deaths from Tuberculosis during the past Thirteen Years.

	Phthisis		Tubercular diseases of organs other than the lungs		Total Death Rate from Tuberculosis
Year	Deaths	Death Rate	Deaths	Death Rate	
1901	9	0.62	19	1.31	1.93
1902	11	0.75	14	0.96	1.71
1903	11	0.75	6	0.41	1.16
1904	14	0.95	13	0.89	1.84
1905	6	0.41	12	0.82	1.23
1906	9	0.61	15	1.02	1.63
1907	12	0.81	11	0.74	1.55
1908	9	0.60	6	0.40	1.00
1909	6	0.40	5	0.33	0.73
1910	10	0.66	6	0.39	1.05
1911	10	0.63	1	0.06	0.69
1912	7	0.44	6	0.37	0.81
1913	11	0.68	2	0.12	0.81

It will be seen from the above table that on the whole the death rate from tuberculosis is declining. This improvement is general throughout the country as shewn in the statistics of the Registrar General for England and Wales, given below:—

Quinquennial Periods.		Mortality per 1000.
1882-1886	...	1.81
1887-1891	...	1.60
1892-1896	...	1.40
1897-1901	...	1.31
1902-1906	...	1.19
1907-1911	...	1.08

The following Diagram shows the annual Death Rate from Tuberculosis for the years 1901-1913 inclusive.



Epidemic Influenza. Four deaths have occurred from this disease compared with none in the previous year.

Table of Deaths from Epidemic Influenza during the last Thirteen Years.

Year		Deaths	Year		Deaths
1901	...	1	1908	...	4
1902	...	2	1909	...	4
1903	...	—	1910	...	3
1904	...	2	1911	...	2
1905	...	2	1912	...	0
1906	...	1	1913	...	4
1907	...	3			

Cancer has caused 17 deaths, equivalent to an annual death rate of 1.05 per 1000, compared with 13 deaths and an annual death rate of 0.81 per thousand in 1912.

The following Table shows the details of Deaths due to Cancer.

			Males	Females	Total
Cancer of	Breast	...	0	1	1
,,	Mediastinum	...	0	1	1
,,	Stomach	...	2	4	6
,,	Æsophagus	...	0	1	1
,,	Rectum	...	0	1	1
,,	Jaw	...	2	0	2
,,	Liver	...	0	1	1
,,	Lung	...	1	0	1
,,	Prostate	...	1	0	1
,,	Intestines	...	2	0	2
	Totals	...	8	9	17

Table of Deaths from Cancer during the last Thirteen years.

Year	Deaths	Death Rate	Year	Deaths	Death Rate
1901	10	0.68	1908	19	1.26
1902	5	0.34	1909	9	0.60
1903	7	0.47	1910	18	1.18
1904	11	0.75	1911	12	0.76
1905	16	1.09	1912	13	0.81
1906	12	0.81	1913	17	1.05
1907	15	1.01			

Table showing Mortality Statistics in certain Towns in 1913.

	Population	Birth Rate	Death Rate (corrected)	Infant Deaths per 1000 Births	Zymotic Death Rate	Respiratory Death Rate	Phthisis Death Rate	Death Rate from other forms of Tuberculosis	Cancer Death Rate	Average Death Rate for 10 years 1903-1912
Accrington	45,525	19.63	14.21	116.33	0.68	2.65	0.79	0.39	—	—
Blackburn	133,931	21.7	17.1	147.8	...	3.07	0.65	0.34	1.03	—
Burnley	109,021	22.8	16.8	174	0.34	3.31	0.96	0.33	0.9	17.6
Church	7,000	23.0	13.7	80.0	0.85	3.0	0.42	0.7	0.42	15.9
Clayton-le-Moors	9,100	22.7	15.8	169.0	2.0	3.0	1.0	0.6	0.88	14.6
Darwen	40,824	18.08	14.18	127	0.27	2.50	0.78	0.29	1.05	—
Great Harwood	14,000	19.0	12.0	97.37	1.28	2.5	.63	.35	.92	11.15
Lytham	10,000	14.0	12.3	71.4	0.5	1.9	0.1	1 death	—	—
Padiham	14,000	23.85	16.43	146.70	1.35	3.00	0.5	0.28	0.78	15.62
Nelson	41,000	17.3	11.5	91	.73	2.61	0.63	0.24	0.92	11.02
Ramsbottom	15,500	17.41	14.32	118.51	1.67	2.25	1.03	0.19	1.29	14.45
Chorley	31,100	23.75	15.62	112	1.22	2.6	0.77	0.07	1.15	16.6
Blackpool	64,186	16.25	14.27	125.6	0.64	2.00	0.76	0.34	1.43	12.36
Oswaldtwistle	16,040	22.38	15.89	157.38	1.37	2.36	0.68	0.12	1.05	15.02

Acts of Parliament relating to Sanitary matters adopted by the Council.

		Adopted
(1)	The Infectious Disease (Notification) Act, 1889,	Nov. 11th, 1895
(2)	The Public Health Acts Amendment Act, 1890, Parts ii, iii, iv, and v.	Dec. 8th, 1895.
(3)	The Infectious Disease (Prevention) Act, 1890,	Dec. 14th, 1903.
(4)	The Public Health Acts Amendment Act, 1907, Parts ii, iii, iv, (certain sections thereof) v, vi, vii, (except sections 82 and 83) viii, ix, and x, (sections 93 and 95)	July 13th, 1908.

Bye-Laws relating to Sanitary matters adopted by the Council.

		Adopted
(1)	Slaughterhouses	Mar. 21st, 1864.
(2)	Snow, Filth, and Keeping of Animals	Mar. 21st, 1864.
(3)	Cleansing Footway and Pavements	Mar. 24th, 1864.
(4)	Common Lodging-houses	Dec. 1st. 1884.
(5)	Houses let in Lodgings, or occupied by members of more than one family	Dec. 1st, 1884.
(6)	Dairies, Cowsheds, and Milkshops	Aug. 18th, 1902.
(7)	New Streets and Buildings	Mar. 14th, 1904.
(8)	Slaughterhouses	September 19th, 1912.
(9)	Offensive Trades	Feby. 20th, 1913.
(10)	Regulations for Preventing the Waste, Misuse, Undue Consumption, or Contamination of Water	July 24th, 1913.
(11)	Tents, Vans, and Sheds	Dec. 18th, 1913.
(12)	Whirligigs, Swings, and Shooting Ranges and Galleries	Dec. 18th, 1913.

House Accommodation. 26 new houses have been erected during the past year, distributed as follows :—

Immanuel Ward ...	10
St. Paul's Ward ...	8
St. Oswald's Ward ...	7
St. Michael's Ward ...	1

These figures do not compare favourably with the two previous years, since in 1912, 30 new houses were erected, and in 1911, 82 ; and there can be no doubt that a considerable shortage of houses available for the working-classes has existed during the year, numerous cases have come to my notice where persons have waited weeks and even months before being able to find accommodation ; this has led necessarily to some overcrowding and living in lodgings. One case was reported to me in which three families consisting of 15 persons were living in one small four-roomed house, and I feel sure that but for the vigilance of the Sanitary Inspector many more cases would have occurred.

Regulations issued by the Local Government Board, Sept. 2nd, 1910, under Section 17 (i) of the Housing and Town Planning, etc., Act, 1909, prescribed the methods to be adopted as regards inspection of dwelling-houses, and under these regulations 123 houses have been inspected.

Three cases of overcrowding were discovered and remedied by the inmates removing to larger premises.

The work done under the Housing and Town Planning, etc., Act, 1909, is as follows :—

Number of houses inspected	123
,, considered unfit for human habitation ...	109
,, representations made to Local Authority with a view to the making of Closing Orders...	0
,, Closing Orders made	0
,, houses in which defects were remedied without Closing Orders	46
,, houses made habitable after the making of Closing Orders...	0
,, houses demolished	0

The chief defects found were dampness, defective floors and yards, defective closets, offensive ash middens, want of ventilation through windows being defective, and broken rain pipes and troughs.

There are no Common Lodging-houses in the Township.

During the course of erection all new houses are inspected, and during the laying of the drains the fall in the pipes and cementing of the joints is carefully examined, also the fitting up of water closets and baths.

A minimum of 150 superficial feet of yard space is given to each house, and a back road 12 feet wide is provided behind each block of buildings.

Bye-laws regarding houses let in lodgings or occupied by members of more than one family were adopted by the Council on December 1st, 1884, and Bye-laws for Common Lodging-houses on the same date.

Tents, Vans, and Sheds. There is existing in our midst a permanent "gipsy encampment," the number of vans standing on which varies from time to time, although it is never entirely vacant. At one period of the year there were from 25 to 30 of these movable dwellings stationed on this piece of land, and complaints have been received from persons living in the surrounding cottages of nuisances caused by these van dwellers.

One of the chief complaints was the nuisance caused by the burning of open fires outside the vans, the smoke, sparks, and smells from which were most objectionable, and prevented the windows of neighbouring cottages being opened.

The Council has also been put to a considerable amount of trouble owing to the owner of the land, who is himself a van dweller, erecting a wooden building ostensibly for a cart-shed, but which was almost immediately furnished and used as a dwellinghouse.

At the time of writing this matter is under the consideration of the Council, and steps are being taken to compel the owner to pull down the building which he has erected in contravention of your bye-laws.

In order to regulate more effectively the conditions existing in this locality, bye-laws have been drawn up and submitted to the Local Government Board for approval.

One further difficulty has arisen owing to the fact that the Local Government Board have not laid down any rule as to the number of persons who may occupy any one van, and on this account we have no absolute guide as to what constitutes overcrowding, which I think undoubtedly exists.

Water Supply. The Township is supplied with water by three reservoirs: Jackhouse, Cobbs, and a separate one for Belthorn village, particulars of which will be found in the following table:—

	Jackhouse	Cobbs	Belthorn
Depth ...	36 feet 9 inches	25 feet	?
Capacity ...	68,000,000 gals.	15,000,000 gals.	800,000 gals.
Height above sea level	635 feet	791 feet	1058 feet
Area of water surface	9 acres.	2a. 2r. 6p.	?
Area of sand filters	900 sq. yds.	450 sq. yds.	80 sq. yds.
Capacity of service tanks	300,000 gals.	150,000 gals.	12,000 gals.

Capacity of Residuum Reservoir 3,000,000 gallons.

The estimated population supplied by these reservoirs is as follows:—

In Oswaldtwistle (Jackhouse & Cobbs Reservoirs)	15,000
In Church Council District ...	560
Belthorn Village, Oswaldtwistle ...	600
Total ...	16,160

The Reservoirs will hold a supply, after allowing 10 million gallons for bottom water, equal to 156 days' consumption.

The quantity of water supplied daily is about 483,600 gallons, distributed thus:—

Domestic purposes ...	281,000	gallons.
Trade purposes	73,000	,,
Compensation water ...	129,600	,,
Total	483,600	,,

The drainage area to the Jackhouse and Cobbs Reservoirs varies in elevation from 630 feet to 1000 feet above the sea. Certain portions of the moorland from which the water would naturally flow to the reservoirs of the Council have been cut off, and the water diverted by intercepting open sluices and drains in the direction of Cocker Lumb and Cocker Brook, leaving the available area from which water is collected 240 acres. Certain portions of the drainage area or gathering ground have a sharp slope, from which the water flows quickly during times of storm and heavy rainfall; other portions of the area have a gentle slope from which the water will not flow quickly, except at times of heavy rainfall.

In the year 1907, the Council acquired Brewer Lot and White Syke Farms, situated within the gathering ground, and in 1908, Standerley Farm and some cottages at Cocker Brook were also purchased at a cost of £2,010.

By the acquisition of these premises, the Council are in a position to prevent pollution of the watercourses feeding the reservoirs, which had previously been a very serious matter.

To augment the water suppy a bore hole was put down at White Syke Farm in 1909, and is acting satisfactorily, and an intercepting drain has been laid at Brewer Lot Farm to collect certain water that before escaped the watercourses.

In 1911, sanction having been received from the Local Government Board for loans amounting to £11,628, sand filters and clean water tanks were constructed for both reservoirs. The filters commenced working in August, 1911, and the water, which previously had shown dangerous pollution, was now markedly improved. The opinion of Dr. Gerland who analysed it in Sept., 1911, being as follows:—

> "It seems to me, from the chemical results so far obtained, and from the freedom from suspended matter and the clarity of the samples, despite the unusual drought this summer, that the Oswaldtwistle Town's supply has very much improved as a potable water since I examined it over a year ago, and that this result must be due to efficient filtration."

The augmentation of the Council's water supply has been under consideration, and in 1912 it was resolved to make a bore hole at White Syke and put down a pumping plant; and that application be made to the Local Government Board for sanction to borrow £1,645 to carry out the scheme.

At the time of writing the work has been completed, and a satisfactory and constant supply was obtained during a 14 days' trial.

This additional source will considerably assist the present available quantity, which in the month of October had dwindled to 24 days' supply plus 10,000,000 gallons of bottom water.

The reservoir for Belthorn village is 1058 feet above sea level. There are two filters with an area of 80 superficial yards, together capable of filtering 24,000 gallons of water per day, which is equal to twice the quantity of water delivered to the village; so that when one of the filters is stopped for resting, the other will filter sufficient water for the daily supply. The total depth of filtering material is 4 feet.

Also there are two service water tanks with valves fixed to work each tank separately. The two tanks have a holding capacity of 12,000 gallons, working them at 4 feet deep. This is equal to one day's supply.

The capacity of the reservoir is 800,000 gallons, equivalent to to 80 days' supply; but the supply of water to the reservoir is assisted by springs on the gathering ground, which are required not only to keep up an ample supply of water to the village, but also to improve its quality for domestic purposes, since the water coming from the upland moor has a distinctly acid reaction, being therefore possessed of lead dissolving powers, and liable to act upon the lead service pipes to the houses.

In wet weather the reservoir is full, most of the drainage water from the moors is therefore turned away to waste, and not allowed to enter the reservoir.

Previous to these waterworks being constructed, the residents in the village had to rely on water from wells. It was found that one well that supplied the greater portion of the residents was polluted with drainage from leaky privy pits, and the water in another well was polluted with surface water from meadow land.

In the month of July, on visiting the Belthorn Waterworks for the purpose of taking samples, I observed a considerable amount of undesirable foreign matter in the service tanks which had gained access owing to them not being covered, and I advised the Waterworks Committee to construct covers to prevent any further risk of contamination. This suggestion was adopted, and will be acted upon during the present year.

Results of Analysis of Jackhouse and Cobbs Water after Filtration, and of Water from Bore Hole.

Samples collected on April 15th, 1913.

CHEMICAL ANALYSIS.

	Jackhouse	Cobbs	Bore Hole
Colour ...	amber brown	amber brown	dull ochre
Turbidity ...	slight	slight	slight
Smell ...	indistinct	indistinct	indistinct
Oxygen absorbed at 27° in 4 hours in acid solution	6.130	0.192	0.078
Free and saline ammonia	0.0010	0.0012	0.0120
Albuminoid ammonia	0.0100	0.0200	0.0014
Nitrous nitrogen	none	none	none
Nitric do.	0.075	0.100	0.020
Chlorides ...	1.30	1.30	1.30
Phosphates ...	present	present	present
Hardness, temporary	3.5	3.5	15.0
Do. permanent	2.5	2.5	0.5
Total	6.0	6.0	15.5
Reaction, lacmoid	alkaline	alkaline	alkaline
Do. methyl orange	do.	do.	do.
Do. phenolphthalein	acid	acid	acid
Action on bright lead foil 24 hours' exposure	0.06	0.10	none

BACTERIOLOGICAL EXAMINATION.

	No. of Colonies in one gramme of water			No. of kinds of Bacteria clearly recognisable		
	Bore Hole	Jack-house	Cobbs	Bore Hole	Jack-house	Cobbs
Non-liquifying bacteria	0	28	7	0	2	1
Liquifying ...	0	3	1	0	3	1
Bacteria associated with sewage or fæcal pollution	0	0	0	0	0	0

Professor Delepine's opinion from above results:—

Bore Hole Water.—Bacteriologically very pure, chemically hard, no action on lead.

Cobbs Water.—Bacteriologically pure, chemically moderately soft, has an action on lead which is near the dangerous limit.

Jackhouse Water.—Bacteriologically pure, but not so pure as last, chemically moderately soft, has a slight action on lead, distinctly below the dangerous limit.

Results of Analysis of Jackhouse, Cobbs, & the Belthorn Water, after Filtration.

Samples collected on July 14th, 1913.

CHEMICAL ANALYSIS.

	Jackhouse	Cobbs	Belthorn
Colour ...	amber yellow	amber brown	dull blue
Turbidity ...	very slight	very slight	very slight
Smell ...	indistinct	indistinct	indistinct
Oxygen absorbed at 27° in 4 hours in acid solution	0.154	0.198	0.022
Free and saline ammonia	0.0004	0.0024	0.0032
Albuminoid ammonia	0.0066	0.0130	0.0023
Nitrous nitrogen ...	none	none	none
Nitric do. ...	0.05	0.06	0.075
Chlorides ...	1.20	1.10	1.40
Phosphates ...	present	present	present
Hardness, temporary	3.0	4.0	2.0
Do. permanent	3.0	2.0	3.0
Total ...	6.0	6.0	5.0
Reaction, lacmoid ...	alkaline	alkaline	alkaline
Do. methyl orange	do.	do.	do.
Do. phenolphthalein	acid	acid	acid
Action on bright lead foil 24 hours' exposure	0.06	0.06	none

BACTERIOLOGICAL EXAMINATION.

	No. of Colonies in one gramme of water			No. of kinds of Bacteria clearly recognisable		
	Belthorn	Jackhouse	Cobbs	Belthorn	Jackhouse	Cobbs
Non-liquifying bacteria	41	938	38	2	2	2
Liquifying ...	6	318	15	2	3	5
Moulds ...	0	0	3	0	0	1
Bacteria associated with sewage or fæcal pollution	0	0	0	0	0	0

Professor Delepine's opinion from above results:—

Jackhouse Reservoir.—There is evidence of some deterioration of the water in this reservoir but no evidence of pollution.

Cobbs Reservoir.—This water is from a bacteriological point of view satisfactory.

Belthorn Reservoir.—This water, though not quite satisfactory from a chemical point of view, is bacteriologically speaking good.

A new water main has been laid down Aspen Lane to the recently built school at West End.

Pollution of a stream supplying a farmstead was discovered, caused by the overflow of a cesspit of a laundry in Borough of Blackburn, and was reported to that authority who had the defect remedied.

The administration of the Factory and Workshop Act, 1901, in connection with

Factories, Workshops, Workplaces, & Homework.

I.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

Premises. (1)	Number of Inspections (2)	Number of Written Notices (3)	Number of Prosecutions (4)
Factories .. .. .. (Including Factory Laundries)	3	1	0
Workshops .. .. .. (Including Workshop Laundries)	43	3	0
Workplaces	0	0	0
Total	46	4	0

2.—DEFECTS FOUND.

Particulars (1)	Number of Defects. Found (2)	 Remedied (3)	 Referred to H.M. Inspector (4)	Number of Prosecutions (5)
*Nuisances under the Public Health Acts:—**				
Want of cleanliness	8	8	0	0
Want of ventilation	0	0	0	0
Overcrowding	0	0	0	0
Want of drainage of floors	0	0	0	0
Other nuisances	3	3	0	0
Sanitary accommodation: insufficient	1	1	0	0
Sanitary accommodation: unsuitable or defective ..	1	1	0	0
Sanitary accommodation: not separate for sexes.. ..	0	0	0	0
Offences under the Factory and Workshop Act:—				
Illegal occupation of underground bakehouse (s. 101) ..	0	0	0	0
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)	0	0	0	0
Other offences	0	0	0	0
(Excluding offences relating to outwork.)				
Total	13	13	0	0

* Including those specified in sections 2, 3, 7, and 8, of the Factory and Workshop Act as remediable under the Public Health Acts.

There were no outworkers notified during 1913. The premises of two persons were inspected which had previously been on our list of outworkers, but they had given up the work.

3.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year. (1)	Number. (2)
Beer Bottling	1
Bakehouses	23
Boot and Clog Makers	14
Pickle Manufacturers	1
Dressmakers and Milliners	9
Joiners and Plumbers	4
Chemical Manufacturers	2
Tinplate Workers	2
Wheelwrights	2
Tailoring	5
Other Trades	5
Total number of Workshops on Register	68

4.—OTHER MATTERS.

Class. (1)		Number. (2)
Matters notified to H.M. Inspector of Factories:—		
Failure to affix Abstract of the Factory & Workshop Act (s. 133) 1901		0
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5) 1901.	Notified by H.M. Inspector	8
	Reports (of action taken) sent to H.M. Inspector	5
Other		0
Underground Bakehouses (s. 101):—		
Certificates granted during the year		0
In use at the end of the year		0

Factories and Workshops. There are 46 factories and 68 workshops. They have been inspected on various occasions, and complete particulars of the matters required to be complied with under the Factory and Workshop Act, 1901, have been taken and entered in the Workshops Record Book.

Five notices have been received from the Inspector of Factories for the occupation of workshops; these were inspected, measurements taken of the cubical contents of the workroom, and have since been entered on the register

Two other workshops were visited, and the tenants found to be carrying on the trade of dressmaking without notifying the local authority, and instructions were given for them to apply to the Factory Inspector for the necessary forms for registration.

The Sanitary Inspector also found that Arthur Duckworth, of Brookside firelight works had been carrying on the trade of a firelight maker without first notifying the Inspector as provided by section 127 of the Factory and Workshops Act, 1901.

Six notices have been received from the Factory Inspector requiring the undermentioned premises to be limewashed, and notices were served to that effect :—

A. Johnson, Blacksmith's Shop, Union Road,—workshop.

White & Co., Bakers, 204 Union Road,—bakehouse.

A. P. Longton, 237 Union Road,—bakehouse.

Mrs. A. Crawshaw, 162 Union Road,—bakehouse.

S. Munroe, 192 Union Road,—bakehouse.

The Public Health Acts Amendment Act, 1890, part ii of which has reference to Factories and Workshops, was adopted on the 9th day of December, 1895.

Dairies, Cowsheds, and Milkshops. The dairies and cowsheds are receiving the special attention of the Health Department, and a complete register has been compiled, giving full particulars of each, and defects requiring remedying. There are 89 farms in the township, all of which are now on the register.

Bye-laws were adopted by the Council on August 18th, 1902, for regulation of dairies, cowsheds, and milkshops, but I am afraid these have not been very strictly enforced in the past. With very few exceptions, the air space is insufficient in the shippons, and falls far short of the 600 cubic feet per cow laid down in these regulations.

I have observed a distinct improvement in the general cleanliness of the cowsheds taken on the whole, but no attention seems to be paid to the grooming of cows; it is the rule rather than the exception to find the hind quarters of the cattle plastered with dried dung, a state of things which ought not to exist.

In regard to this point one especially flagrant case was observed by the Sanitary Inspector and myself, and reported to the Health Committee, in which the whole of the hind quarters and the udders of the cattle at a certain farm were in such a disgusting condition that no attempt at cleaning or brushing could possibly have been made, and it would be impossible to milk the cows without seriously contaminating the milk with pieces of dried dung.

I am pleased to find that the farmers on the whole are paying better attention to the limewashing of their cowsheds; difficulty had been experienced previously in getting the work done twice a year, as required by the regulations, but the Sanitary Inspector found on his visits during the past year considerable improvement in this respect, the notices sent out in most cases being complied with without delay.

The drainage in most of the shippons was found to be very defective, and the condition of the farmyards in many instances was unsatisfactory. These matters are receiving attention.

Isolated dairies are gradually replacing those opening from the interior of the farmhouse.

There are no milkshops in the district.

Bakehouses. The bakehouses—23 in number—have been inspected, and rules have been drawn up and distributed to each, shewing the regulations to be observed. In four cases whitewashing had not been done, and notices were served for the work to be commenced without delay.

There are no underground bakehouses.

Slaughterhouses. There are four licensed slaughterhouses, and five at the public abattoirs. They have been visited frequently and found clean.

The public slaughterhouses were erected at a cost of £1,506, the site being freehold, subject to a rent charge of £4 18s. 6d.

24 beasts, 6 calves, 100 sheep, and 24 pigs can be laired.

During the year 1913 the number of animals slaughtered at the Council's abattoirs was as follows :—

a. Cows, Bulls, and Heifers ...	538
b. Calves	21
c. Sheep	2176
d. Pigs	420
Total ...	3155

The offal and refuse from the public slaughterhouses are removed under an agreement with the occupier of Moss Hall Farm.

In September, 1912, new slaughterhouse bye-laws were adopted after being approved by the Local Government Board.

Any person using the slaughterhouses other than a tenant is allowed to use the public portion only, and must pay the following fees for all animals slaughtered :—

For each sheep	3d.
For each pig or calf	6d.
For each head of cattle	1s.

No animals are allowed to be slaughtered in the district except at the Council's slaughterhouses or on licensed premises, and butchers intending to use the slaughterhouses between the hours of 5-30 p.m. and 9 a.m. on any week-day, or at any time on Sundays must notify and arrange with the Sanitary Inspector before doing so.

Two cottages adjoining the slaughterhouses have been purchased, one of which it is intended shall be occupied by the caretaker.

Offensive Trades. Numerous complaints have again been received of the nuisance arising from the Nook Bone Works.

Some of the complaints had reference to the smells arising from the premises themselves, but many others related to the stench caused by an effluent from the works finding its way into the neighbouring stream flowing to Smithy Brook.

On examination the effluent was found to be of a deep black colour, and evolved a foul smelling gas apparently consisting mainly of sulphuretted hydrogen, and could be traced far down the stream.

I reported the matter to the Inspector of the Ribble Joint Committee, and also forwarded him samples of water taken from the river, following which he visited the spot and made certain recommendations to the owner of the works.

The effluent could be traced back to the bone works, and arose from a faulty cesspit, and although some improvement was subsequently noticeable, I find that the nuisance has recurred.

At the time of my original investigation into this nuisance, there was very strong presumptive evidence that many hens had been poisoned by drinking the water from the stream, and as still further down I found that labourers employed on the construction of a new mill close by the river were in the habit of drinking this water, warning was given them of the risks they were running by the procedure.

Owing to numerous complaints, in the month of August I submitted a special report to the Health Committee on the condition of the premises themselves, and the Council had under consideration the question of instituting legal proceedings against the owner. I must confess that since then very few complaints have reached me respecting the works *per se*, and on this account no further steps have been taken.

No complaints have been received during the year concerning Messrs. Bowdler & Bickerdike's Chemical Works.

I still occasionally receive complaints in connection with the Abbey Grange Pickling Works. Application was made to the Local Government Board for pickle manufacturing, amongst other businesses, to be included amongst the offensive trades. Sanction to this however was refused. The pickle works at Bury Court are now closed.

In 1912 new bye-laws were drawn up to regulate the offensive trades, and the following business or trades are now included:—fish frier, tanner, leather dresser, fat melter or fat extractor, glue maker, size maker, gut scraper, dealer in rags and bones, and blood drier.

Black Smoke. The time limit allowed for the emission of black smoke is 8 minutes per hour, but I am afraid that it is the rule rather than the exception for this limit to be much exceeded.

Observations taken by the Sanitary Inspector during the year show that whereas in one mill the emission of black smoke was only 3½ minutes in the hour, in other cases the period was as much as 24 minutes. No legal proceedings have been instituted in respect of this nuisance, but the Clerk was instructed to write warning the offenders that, unless the time limit laid down by the Council was adhered to, further measures would have to be taken to enforce it.

Removal and Disposal of House Refuse. The greater part of the work continues to be carried out by the employees of the Council, though in some of the outlying parts of the Township the cleansing is done by tender.

The whole of the work is now under the control of the Health department.

During the year, 4,899 loads of domestic refuse were dealt with, as against 4,784 loads in the previous year.

The arrangements made three years ago with Accrington Corporation to destroy garbage and fish refuse from this district still hold good, and fishmongers have been requested to provide covered pails for their refuse. 106 loads of fish refuse have been disposed of.

Galvanised sheet iron ash bins were introduced two years ago, and since then no plans of new houses have been passed unless provided with these articles. We are also gradually fixing them in all houses where the present ashes places are offensive.

The total number of bins now in use is 186, and there remain 632 open ashpits and 529 closed ones.

In my reports for the years 1911 and 1912, I urged your Council to erect a destructor as early as possible, pointing out that the lease of the present "tip" ran out in 1914, and that moreover it was rapidly becoming filled up.

The matter has been under consideration from time to time during the year, but I regret to have to report that the scheme is no further advanced than it was twelve months ago. The chief difficulty has been the selection of a suitable site. Four different situations have been recommended from time to time, two of which are already owned by the Council, and the other two would need to be purchased.

All these sites have been visited and their advantages and disadvantages discussed both by the Health Committee and the General Purposes Committee on many occasions, and it was finally decided to advise the Council to fix upon the sight at Heys Storeyard; following this a petition was signed by residents of the neighbourhood protesting against a destructor being erected in that district, and at the next Council meeting the whole question was referred back for further consideration.

There is undoubtedly an impression amongst many people that a destructor is certain to cause an intolerable nuisance, but I have no hesitation in saying, as I have repeatedly stated during the year, that in a modern destructor the nuisance is a negligible quantity, and cannot be compared with the disgusting state of things already existing at the present "tip."

I would again urge upon you the need for immediate steps being taken to fix upon a site and proceed with the erection of the plant at the earliest possible moment.

Disposal of Excrement. Progress still continues to be made in laying down sanitary pipe sewers with ventilating manholes in place of the old stone soughs in back roads, and in converting the old privies to the water closet system. 30 privies have been altered to the water system and 3 to pails, after notice had been sent from the Health Office.

A recent census taken by the Sanitary Inspector shows the number of different types of closets to be as follows:—

Fresh water closets	...	257
Tippler "	...	2452
Salford "	...	399
Pails "	...	377

During the year 642 loads of excreta were removed.

Whenever possible only water closets are now allowed to be erected, and where the dry methods are still in use and are foul, notices are served on the owners to convert them to water closets.

In order to hasten the process of conversion, application was made in the month of March, to the Local Government Board, for sanction to borrow £1,040 for the purpose of contributing towards the cost of converting pail closets and privy middens to the water system, but the application was refused on the grounds that sub-section 4 of section 39 of the Public Health Acts Amendment Act, 1907, did not give the Council authority to make the proposed contributions. Moreover they did not look with favour upon slop water closets, owing to the frequency with which the vertical shafts become foul, the tipplers get out of order and blockages occur, and suggested that the question of providing clean water closets should be considered.

There is no doubt that all the above objections are well-founded, and the Council are quite alive to the reality of them, and would ere now have adopted the clean water system but for the fact that our present water supply is inadequate for the purpose, and the slop water method has been in use as being at any rate superior to privies and pails if not altogether what might be desired.

As mentioned under 'water supply,' the Council are endeavouring to increase the quantity of water available, and have sunk a new bore hole to effect this, and once the amount is adequate, clean water closets will be installed.

Sewerage, Drainage, & Sewage Disposal. Progress still continues to be made in the sewering of the district with sanitary glazed pipes with cemented joints and ventilating manholes, and every year a large number of house drains are overhauled in converting privies to the water closet system. In the case of new property the drains are all examined by the Sanitary Inspector before being filled in, strict attention being paid to the joints and the fall of the pipes.

In the main road many of the overhead wire standards have been connected with the sewers and used for ventilation.

The sewage is dealt with at the Outfall works in open septic tanks, and then passed through nine feet deep revolving sprinkler filters, the final treatment being upon the land filter area.

During the year 1909, the Local Government Board sanctioned the expenditure of £2,600 for extensions, etc., at the sewage works. This work has now been carried out, additional revolving sprinkler filters—making six in all—and two detritus tanks having been laid down. The sludge is carted away by farmers to spread upon their land.

A new Humus (Dortmund) tank has been constructed at a cost of £400.

The effluent continues to be good and is quite satisfactory to the Inspector of the Ribble Joint Committee.

The question of the sewerage of Belthorn has been under careful consideration during the year, and the Council have agreed to purchase New Hall Head Farm for outfall sewage works for £1267. Application was made to the Local Government Board for sanction to borrow this amount, together with £1852 for the construction of the works, and £45 for legal expenses.

Sanction has now been obtained and the work will proceed without delay.

As regards the sewerage of Knuzden arrangements are being made to acquire land belonging to Capt. Petre, near to the Red Cap Inn, for the purpose of laying down outfall works. The construction of these will soon be in progress, and will deal with the sewage from the Blackburn Corporation Small Holdings situated in this Township, for the sewering of which that Borough has made application.

The sewering and excavating of the following streets has been completed during the year 1913:—

Back road between Peel Street and Mason Street, and back road on north side of Thomas Street.

Higher Peel Street, back road behind Lord Street, from Jubilee Street to Catlow Hall Street, and higher portion of Mason Street.

New Street off Tower Street.

The following streets have been paved and flagged:—

Haworth Street (portion of).

Mason Street.

Peel Street.

Back road between Peel Street and Mason Street.

Back road on north side of Thomas Street.

Blackburn Road, near Knuzden Plantation.

Higher Peel Street.

Disinfection in all cases of notifiable infectious diseases is carried out as efficiently as possible in the absence of a fever hospital. Cases are isolated, as far as we are able, in the premises in which they occur—always a difficult matter in cottage houses. Printed forms with the requisite precautions for each disease, and disinfectants, are supplied. At the end of the illness, the rooms are thoroughly disinfected with formic aldehyde and sulphur fumes, and the bedding sterilised by heat at the gasworks. Izal is used for disinfecting drains, etc.

Smallpox Hospital. The premises rented by the Council for use as a Smallpox Hospital are always in readiness in case the disease should occur. Four beds are always kept standing and the bedding well aired, so that in an emergency patients could be admitted practically at a moment's notice.

A special ambulance cab is also kept ready at the stables to facilitate the removal of cases.

As mentioned earlier in this report, the hospital was put into use in the month of January for the reception of a case of smallpox which occurred unexpectedly, and within 2½ hours of the notification being received the patient was safely in bed, and everything in complete going order.

The present caretaker is Abraham Taylor, of High Street.

The question of erecting a new Smallpox Hospital has been under consideration during the year. The existing building is only held on lease, is difficult of access, and owing to its exposed situation is difficult to keep in repair, moreover the buildings themselves are not well adapted for the purpose. None of the surrounding authorities will consent to admit cases of smallpox from this district into their hospitals, and in consequence a plot of land has been provisionally selected on which it is proposed to erect a new isolation block.

Dr. Sergeant, the County Medical Officer, has visited the site and approved of the situation, but some difficulty having arisen in respect of an adequate water supply, the matter is to be further considered. In the meantime the old premises are still being held on a rental.

Hospital Accommodation is provided by the Accrington Victoria Hospital, the Blackburn and East Lancashire Infirmary, and the Blackburn Union Hospital. The local Nursing Association, which employs two nurses, does a large amount of useful work in the Township, and their services are much appreciated.

Schools. There are eleven day schools in the Township, and one just outside the district, where Belthorn children attend. An additional school is in course of erection at West End. All of them have been disinfected with formic aldehyde and sulphur fumes. Attention has also been paid to the water closets and drains.

No schools were closed during the year on account of infectious disease, with the exception of St. Andrew's, the infants' department of which was closed for one half day for disinfection owing to one of the teachers being found to be suffering from diphtheria.

In the case of infectious diseases occurring in a school, exclusion of children from infected houses is relied upon, the suggestions given in the memorandum issued jointly by the Local Government Board and the Board of Education in September, 1909, being followed as closely as possible.

Measles may be said to have been practically absent during the year, and the only epidemic of any extent that occurred in the schools was an outbreak of mumps which commenced in November and spread more or less throughout the Township.

Food Inspection. As stated above, there are four licensed slaughterhouses and five at the public abattoirs. They are visited at time of slaughtering, and the carcases examined.

During the year it has been necessary to condemn at the abattoirs, as unfit for human food,—

2 whole cows and
Portions of three other cows.

All the above were found to be affected with tuberculosis.

In the case of the two whole carcases, the butchers concerned were not inclined to agree to the meat being condemned, and threatened to take legal proceedings against the Council. They were given the opportunity of having an inspection made by a Veterinary Surgeon on their own account, and I called in Mr. Allen, Veterinary Surgeon, of Accrington, and Mr. Burndred, Veterinary Inspector to the Blackburn Corporation, to make an autopsy on behalf of the Council. Both these gentlemen agreed that the meat was entirely unfit for human consumption, and the owners then surrended the carcases.

In the month of August, I examined a quantity of fish which had been seized by the Sanitary Inspector from two hawkers. In both cases the fish was unfit for human consumption, being badly fly-blown, and commencing to putrify. The Council decided to prosecute in both cases, and at Church Police Court in September was successful in each instance one defendant being fined 10/- and costs, and the other 20/- and costs.

A quantity of bananas was also seized and condemmed as being unfit for food, but in this case no legal proceedings were instituted.

The following case is interesting inasmuch as although we have no powers under the Tuberculosis Order, 1913, the Sanitary Inspector and myself were instrumental in obtaining a successful prosecution under these regulations, which was instituted by the Corporation of Blackburn.

On June 20th, 1913, about 9 p.m., my attention was called by the Sanitary Inspector to a reddish brown cow, being driven down Heys Lane, He had kept the beast under observation in a field at the top of this lane for about 1½ hours, on account of the animal being very evidently a "screw," and fearing that it might be taken to some slaughterhouse unobserved.

We watched the cow being driven up Union Road, and at Driver's farmyard it was detained, as a little further on is a private slaughterhouse, which we were afraid might be the place of destination. On examination, I found the animal very acutely ill from tuberculosis; it was emaciated, coughing badly, very exhausted and feverish; the right anterior quarter of the udder was indurated, and there were two pustules on the teat. The beast was quite unfit to be driven. The boy in charge of it said he had been told to drive it to Blackburn, and meet two men at Audley. Not having any authority under the Tuberculosis Order, 1913, to condemn the cow, we went on towards Blackburn to see that the animal was not taken to the private slaughterhouse at Knuzden. At Copy Nook Police Station I gave information that a Tuberculous cow was coming along the road, and asked to have it watched and detained if necessary. This was done, and the animal slaughtered next morning, after examination by the Veterinary Inspector to the Blackburn Corporation.

I examined the carcase at Blackburn Abattoirs, and found very extensive miliary tuberculosis and advanced emaciation.

The Blackburn Corporation decided to prosecute the owner under the Tuberculosis Order, 1913, and the Sanitary Inspector and I attended the Blackburn Borough Police Court to give evidence.

The defendent was fined 20/- and costs.

In this instance had we had powers under the Diseases in Animals Acts, 1894-1911, action could have been taken immediately, instead of the case having to be dealt with by another authority.

I am indebted to Superintendent Palmer for the following particulars of action taken by the County Police, under the Food and Drug Act, in this Township during the past year :—

	No. of samples taken		No. of samples taken
Milk	24	Ginger	2
Butter	7	Jam	2
Margarine	6	Vinegar	2
Whiskies	6	Cornflower	1
Pepper	5	Rum	1
Coffee	4	Syrup	1
Lard	4		
Arrowroot	2	Total	67

There were no prosecutions, but one milk vendor was ordered to be cautioned, and in four cases the spirits were found to be slightly adulterated with water.

Petroleum Act. Two licenses have been granted for the storage of petrol, and one for storage of benzine.

ANNUAL REPORT

OF THE

INSPECTOR OF NUISANCES

AND CLEANSING SUPERINTENDENT.

To the Chairman and Members of the Urban District Council of Oswaldtwistle.

Gentlemen,

I have the honour of submitting for your consideration my Third Annual Report and Statistics of the work done, and actions taken in connection with the sanitary and cleansing departments of this Authority, for the year ending December 31st, 1913.

As in previous years, periodical inspections have been made of the district with a view of ascertaining the sanitary condition in the Township, and any nuisances discovered during such inspections have been dealt with in accordance with the provisions of the various Health Acts.

The work of nuisance abatement has been carried out with very little friction, with the exception of the nuisances at the farms, and these were left in abeyance until the spring of this year, as owing to the cattle having to be housed for the winter it was found impossible to commence to execute structural alterations.

In the majority of cases where notices were served it has been the desire of the owners for the Inspector to meet them at the premises complained of. This request has been complied with, and I am pleased to say that the results have been highly satisfactory.

In addition to this, owners frequently ask to be advised with reference to alterations and repairs to sanitary conveniences and drains for which no notice has been served, so that the requirements of the Health Committee may be met.

The sanitary condition of house drainage, closet and ashpit accommodation in the district is steadily improving, but I regret to say that no improvement has yet been made with the property in High Street, Broadfield Street, Broadfield Terrace, Lower and Higher Heys; and I am still confident that it is in the power of the Local Authority to require the owners to provide water closets in lieu of the defective privy middens.

Old Privies. Many old privies still exist in the district and nuisances frequently occur from them, owing to the defects generally found in the chambers. Several of these have been reconstructed to the waste water system, but there is still room for greater improvement, and I shall be more than pleased when the sanction of the Local Government Board has been obtained for the loan already applied for, viz.:—£1040, to assist the owners in reconstructing these to the fresh water system, as I am informed that the new bore hole is yielding a supply of water equal to the demand required for the reconstruction of the whole of the pails and privies in the district.

Infectious Diseases. 356 visits have been made to 93 infected houses. In each case reported the infected house has been inspected, instructions given re isolation of patient, a printed form with the requisite precaution for each disease and disinfectants supplied. After the recovery of the patients, 79 premises were disinfected with vaplamps and formic aldehyde vapours, and the bedding and clothing dealt with in the disinfecting chamber, first with steam and afterwards with dry heat, but I must complain of the unreliability of our disinfecting chamber, and I would urge the Health Committee of the necessity of a new up-to-date appliance for disinfecting bedding.

The schools have during the year received careful attention with respect to the outbreaks of disease, and they have been sprayed with formalin on the immediate discovery of any infectious disease.

Hospital. The hospital has again been kept in a very clean state and in as satisfactory condition as can reasonably be expected under its present condition, as the premises are far from being suitable for the disease it is used for, as it is almost impossible to free the premises from dampness.

INFECTIOUS DISEASES.

Table showing Number of Infectious Cases dealt with Monthly.

Month.	Enteric Fever	Scarlet Fever	Typhoid	Diphtheria	Erysipelas	Small-Pox	Puerperal Fever	Cerebro-Spinal Fever	Ophthalmia Neonatorum	Pulmonary Tuberculosis	Continued Fever	Total Number of Diseases visited.
January	1	5	0	1	2	1	0	0	0	1	0	11
February	0	3	0	0	2	0	0	0	0	4	0	9
March	0	3	0	3	0	0	0	0	0	4	0	10
April	0	7	0	1	2	0	0	0	1	2	0	13
May	0	5	0	0	0	0	0	0	0	2	0	7
June	0	0	0	0	1	0	0	0	0	2	0	3
July	0	2	0	0	0	0	0	0	0	3	0	5
August	0	1	0	0	0	0	0	0	1	1	0	3
September	0	3	1	1	1	0	0	0	0	1	0	7
October	0	4	0	0	1	0	0	0	0	0	0	5
November	0	3	0	0	0	0	0	0	1	1	0	5
December	0	8	0	2	0	0	0	0	1	4	0	15
Totals	1	44	1	8	9	1	0	0	4	25	0	93

The total number of nuisances brought before the Health Committee during the year was 277, representing 234 houses and premises. This total is made up as follows :—

	Number
Dairies and cowsheds	58
Smoke observations	4
Dirty sanitary conveniences and dwellings	7
Offensive open ashpits	34
Ashpits without doors	24
Defective buildings and outhouses ...	1
,, rain-water spouts ...	6
,, tipplers	6
,, closet pails	12
Damp dwellings	4
Other nuisances	38
Obstructed drains which were opened by the Council's workmen ...	14
Choked W.C's	5
Choked yard drains	7
Keeping of animals so as to be a nuisance	2
Defective yard drains	20
,, house roofs	2
,, house and yard flags ...	8
,, sink pipes	6
,, privy middens	5
,, eaves and down troughs ...	9
FACTORIES & WORKSHOPS :—	
Limewashing	5
Total ...	277

Result of Notices requiring Abatement of Nuisance from Overcrowding in Dwellinghouses.

No. of houses in which the number of inmates was reduced	2
,, vacated	1

Dairies and Cowsheds.

COWSHEDS :—

No. of persons on register as cow-keepers ...	79
,, cowsheds inspected	110
,, milking cows kept	1314

DAIRIES :—

No. of dairies placed on register isolated ...	23
Opening from interior of farmhouse ...	56
No. of Inspections	79

Unwholesome Food. Two prosecutions were instituted against persons offering unwholesome fish for sale, and the defendants fined for the offence.

The total amount of food (unsound) destroyed during the year is as follows :—

Beef ...	1904	lbs.
Pig ...	156	,,
Fish ...	35	,,
14 Bananas.		

Alterations made, and New Structures Provided.

No. of old privies converted into water closets ...	30
,, ,, pail closets ...	3
No. of ventilating shafts	4
,, water closets repaired	5
,, pail closets ,, ...	17
,, privies ,, ...	10
,, ashpits ,, ...	12
,, ashbins provided	33
,, manure pits repaired	2
,, yards paved and repaved	5

No. of drains cleaned	11
,, drains and waste water closets cleaned by U.D.C.	262
,, slop sinks and pipes repaired	12
,, new water closets	4
,, new soil pipes	2
,, cellar drains disconnected	6
,, houses drained to sewer	21
,, houses having had roofs repaired and spoutings fixed	16
,, nuisances abated from keeping animals ...	2
,, overcrowding	3
,, other nuisances abated	16

Bakehouses.

No. of Bakehouses in use	23
,, underground bakehouses	—
,, bakehouses registered as factories	—
,, inspections	72
,, bakehouses limewashed (after notice) ...	5

Slaughterhouses.

No. of slaughterhouses at public abattoir	5
,, registered slaughterhouses now in use ...	—
,, licensed ,, ,, ...	4
Total ...	9
,, slaughterhouse licenses renewed	4
,, applications for licenses for new slaughterhouses granted	—
,, ,, ,, ,, refused	—
,, inspections	259

Workshops.

No. of new workshops notified by H.M. Inspector of Factories...	8
,, workshops now on register	68
,, complaints received from H.M. Inspector of Factories...	5
,, notices served relative to insanitary condition at workshops	5
,, inspections	46

Work carried out in compliance with notices, viz. :—

,, rooms limewashed and cleansed	5
,, workshops in which means of ventilation have been provided	0
,, workshops repaired	0
,, other nuisances abated (principally connected with sanitary conveniences)	3

Scavenging and Removal of House Refuse, &c.

During the year, 4899 loads of domestic refuse and 812 loads of street sweepings were removed as follows :—

	Domestic refuse loads	Street sweepings loads		Domestic refuse loads	Street sweepings loads
January	365	75	July	371	85
February	434	75	Septem.	481	67
March	364	50	August	363	40
April	411	63	October	432	76
May	396	68	Novem.	425	78
June	488	61	Decem.	369	74

Number of Loads Tipped on Various Tips.

	John Street Loads	Stanhill Estate Loads	Marshall's Loads	Holding's Loads	Other Places Loads
January... ...	300	0	4	22	39
February ...	383	0	6	3	42
March	274	0	9	16	65
April	342	0	9	4	56
May	326	30	2	0	38
June	391	36	16	0	45
July	334	17	0	0	20
August	290	43	7	9	14
September ...	426	12	9	9	25
October	331	36	12	18	35
November ...	353	11	2	19	40
December ...	304	24	10	6	25
Totals...	4054	209	86	106	444

Refuse Collected and Average Cost per Load for the whole Twelve Months.

Month.	No. of Loads Domestic Refuse	No. of Loads Nightsoil.	No. of Loads Fish Refuse.	Average Cost per Load of Domestic Refuse			Average Cost per Load of Nightsoil			Average Cost per Load of Fish Refuse			Total Cost of removing Domestic Refuse			Total Cost of removing Nightsoil			Total Cost of removing Fish Refuse		
				£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
January ...	365	26	8	0	1	11	0	3	6¼	0	7	6¾	35	1	5½	4	11	7½	3	0	6
February ...	434	45	8	0	1	11¾	0	2	9¾	0	8	9½	43	6	5	6	7	5	3	10	4
March ...	364	41	8	0	1	11½	0	3	4½	0	8	5	35	15	4	6	17	0½	3	7	4
April ...	411	44	8	0	2	0¼	0	3	1¾	0	8	7	41	4	0½	6	18	6½	3	8	9
May ...	396	48	8	0	1	10¾	0	3	0¾	0	8	10½	37	7	3¾	7	7	9¾	3	11	0
June ...	488	59	8	0	2	3	0	2	4¾	0	8	10¾	54	18	5	6	18	6	3	10	2
July ...	371	69	10	0	2	3	0	2	4¾	0	7	10	41	18	1	8	5	7	3	18	1
August ...	363	50	8	0	1	3½	0	1	3½	0	7	9	23	12	3	3	4	6	3	2	8
September	481	68	10	0	1	10	0	3	4¼	0	8	6½	44	18	10	11	8	10	4	5	5
October ...	432	61	10	0	2	0½	0	2	4½	0	8	9½	44	7	3	7	5	6	4	8	0
November ...	425	77	10	0	2	1¾	0	3	7½	0	8	7	45	10	8	13	19	2	4	5	11½
December ...	369	54	10	0	2	0½	0	3	0½	0	8	10½	37	12	1	8	4	10	4	8	8
Totals...	4899	642	106	1	3	7½	1	14	4¾	5	1	6	485	12	1¾	91	9	4¼	44	16	10½

	s.	d.
Average per year per load of refuse	1	11¾
,, ,, ,, nightsoil	2	10¾
,, ,, ,, fish	8	5½

Housing and Town Planning, etc., Acts, 1909.

The work of housing inspection of the district has been carried out with fairly good results, and 123 houses have received visits, and reports presented at your monthly Health Meetings; but I am still of opinion that the Council are too lenient with the owners of property to effect results such as are required by the Local Government Board, as some difficulty is experienced in getting offensive open ashpits replaced by galvanised iron dust bins, and also the providing of new drains to cottage property, as in these two defects the Council are empowered to execute the work required and recover the cost from the owners. I think they should exercise their powers in this respect, and provide for the better sanitary surroundings of the houses of the working class, several of which require strict attention in the matter already referred to in the report.

The property inspected is situate in the following localities viz:—Lodge Terrace, Duncan Square, Vine Street, Mill Hill, Stanhill Nab Lane, Union Road, Lord Street, and Back Sun Street.

In conclusion, I desire to acknowledge the many acts of kindness extended to me during the year by the Health Committee and their Chairman, Medical Officer of Health, and all who have assisted me in endeavouring to improve the health of the inhabitants of the district, my thanks are extended to them.

I have the honour to be

Your obedient Servant,

ARTHUR ASHWORTH,

Cert. Royal San. Inst. Hon. Plumbing,

Inspector of Nuisances & Cleansing Superintendent.

May, 1914.